

Interest Group Networks

“A Senior Honors Thesis”

“Presented in Partial Fulfillment of the Requirements for graduation
with research distinction in Political Science in the undergraduate colleges
of The Ohio State University”

by
Jamie Richards[†]

The Ohio State University
2011

Project Advisor:
Professor Jan Box-Steffensmeier, Department of Political Science

[†]The thesis is part of a collaborative project with Janet M. Box-Steffensmeier, The Ohio State University (steffensmeier.2@osu.edu), and Dino P. Christenson, Boston University (dinopc@bu.edu). Richards's participation included significant data collection, interviews in Washington, D.C., and a recent focus on network comparisons. Richards would like to thank Larry Baum and Chip Eveland for discussions and guidance related to this project and the Social and Behavioral Sciences Division and the College of Arts and Sciences for an undergraduate student grants to pursue aspects of this research.

Winning in front of the courts, the legislative arena, or the executive branch is not a solitary act. While interest groups use a variety of techniques to exert influence, coalition strategies are the dominant lobbying technique. That is, interest groups do not work alone. However, many questions remain about such coalitions.

Interest groups form coalitions to pursue their strategic goals at reduced costs, shape public debate by influencing a broader platform, gather information, and receive symbolic benefits (Hula 1999). Further, Hula's classic work emphasizes the need to explain interest group coalitions, which can be viewed as institutions of collective leadership, bargaining, and strategy among member organizations. In other words, it is necessary to understand interest groups as part of a network and the relationships among them. In this piece, we examine interest group network linkages.

The network structure of interest groups is important because the structures serves as a conduit of information. It also matters because of the strategic interaction of networked groups. In the political world, where it is often said that who you know matters as much as what you know, both aspects of network structure are important.

1 Motivating the Search for Interest Group Coalitions

Classic works in the interest group literature have sought to understand why interest group coalitions form. A discussion of resources initiates most scholarly work on this topic. That is, scholars maintain that coalitions serve as an economical and efficient means to form a more powerful bloc (e.g., Berry 1977, Berry & Wilcox 1989, Schlozman & Tierney 1986, Hula 1995, Hojnacki 1998, Whitford 2003). Hojnacki's (1998) theory of strategic coalition formation summarizes the factors influencing coalition formation as perceived strength of the opposition, previous experience in a coalition, whether the group is pivotal or critical to the success of the coalition.¹ Coalitions thus signal broad support to policy makers on an issue (Mayhew 1974, Kingdon 1981, Esterling 2004, Mahoney 2004).

Social network theory also suggests that alliances form out of the pursuit for access to resources and information (Gilsing et al. 2008). That is, coalitions function as 'pipelines' through which information and knowledge flow. The incentive for interest groups to form networks appears to be similar to that of firms: to share information and to diffuse information more quickly or to enhance the efficiency of cooperation (Teece 1986, Whitford 2003, Gilsing 2005, Gilsing et al. 2008). In addition, there are control benefits, such as sanctions, reputation, and trust. The social network literature discusses the positive effects of networks on group performance, growth (Powell, Koput & Smith-Doerr 1996), speed of innovation (Hagedoorn 1993), organizational learning (Hamel 1991), and reputation (Stuart 1998).

Bacheller (1977) emphasizes the importance of both group characteristics and relationships for a complete understanding of the role of interest groups. The interest group literature provides an extensive and thorough examination of individual group characteristics. In spite of strong interest in group relationships, (e.g., Heinz et al. 1993, Carpenter, Esterling & Lazer 1998*a*), heretofore, there has not been much empirical work on group relationships. Whitford (2003, p. 46) states that "as recent studies suggest, the network aspects of group coordination - the specific interconnections between groups - may be as important as whether participation occurs at all." Our work brings renewed focus on the interconnections between groups.

Various network measures for interest group coalitions serve to effectively capture group relationships and have great potential to provide substantive insights. Our network characteristic measures may be useful to reexamine important questions previously assessed only with survey data and interviews, which are the common approaches in the current interest groups literature. For example, Heaney's (2004) analysis showed no statistically significant effect of resource levels on leadership position within coalitions. Our measure of network centrality could be used, arguably as a more objective measure, of leadership position to reexamine

¹Some interest coalition formation literature distinguishes types of interest groups, arguing that different types of interest groups are more or less likely to join coalitions (Clark & Wilson 1961, Caldeira & Wright 1990). This suggests that one should account for the type of interest group, such as whether it is a trade association, citizen group, or union, though Mahoney (2004) did not find this distinction to be statistically significant in her recent work. We are able to reexamining this question since we include Standard Industrial Classification (SIC) codes.

this hypothesis. In addition, our measure will be available over longer time spans and across a host of policy areas.

The consensus in the network literature tells us that embeddedness in a network impacts economic and innovative performance (Nooteboom 1992, Hagedoorn 1993, Powell, Koput & Smith-Doerr 1996, Rowley, Behrens & Krackhardt 2000, Ahuja 2000*a*, Owen-Smith & Powell 2004, Gilsing et al. 2008). The network literature on firms finds that the number of direct ties, indirect ties, and redundancy among ties all have an impact (Ahuja 2000*a*, Shan, Walker & Kogut 1994, Ahuja 2000*b*, Baum, Calabrese & Silverman 2000, McEvily & Zaheer 1999). We will test whether similar findings hold for amicus interest groups.

Network hypotheses often focus on the location of groups in the network. If a group has a high measure of centrality they hold a brokerage position between groups. Central interest groups are better informed and more attractive network partners. Network density provides other interesting hypotheses to examine as well (Granovetter 1973, Coleman 1988, Carpenter, Esterling & Lazer 1998*b*, Burt 2001). For example, Coleman’s (1988) theory states that network closure creates trust in a social structure and secures information flows. Teasing out how different interest group networks vary on the measure of closure and what the impact is on judicial decision making and litigation success is among the many interesting questions motivated by network theory that have not yet been addressed in the study of interest groups.

2 Network Measures, Methods & Analysis

Network analysis is an interdisciplinary field that focuses on the study of groups and the relationships among observations. Network methods are specifically developed to account for the interdependency of observations. If networks are analyzed with standard methods, incorrect inferences result, due to the violation of independence assumptions. Traditionally, network methods have focused on rich description of the data, however, the field has undergone rapid growth and development in recent years. Measures have been developed to describe network positions, dyadic relationships, and the network as a whole.

Particularly exciting to us are the recent developments in network statistical analysis. For example, the development of dynamic social network analysis takes advantage of longitudinal components. We can model changing relationships over time and identify latent clusters in the network (Xu & Zheng 2009). Along with specialized methods, there is a burgeoning body of interdisciplinary theory about type of ties, importance of structure, and mechanisms (Borgatti et al. 2009). Borgatti et al. lay out the typical questions posed about networks in the social sciences, which include looking at the variation in structure and network properties across different contexts and time, as well as explaining outcomes with networks and the formation of network ties.

Our current work on the topic focuses on three empirical analyses of amicus curiae networks. The first looks at the evolution of the networks from 1930 to 2010. The second uses the Exponential Random Graph Model (ERGM) with latent clusters to estimate the effects of covariates on the relationships in the network, while also estimating parameters that provide a statistical description of the network and accounting for latent clusters. The third part tests whether network measures of interest group influence help to explain judicial decision making and litigation success. Each of these projects are in development and require further funding for their successful completion. We present some of the key inferences, motivating theories, descriptive statistics and preliminary analyses from these projects below.

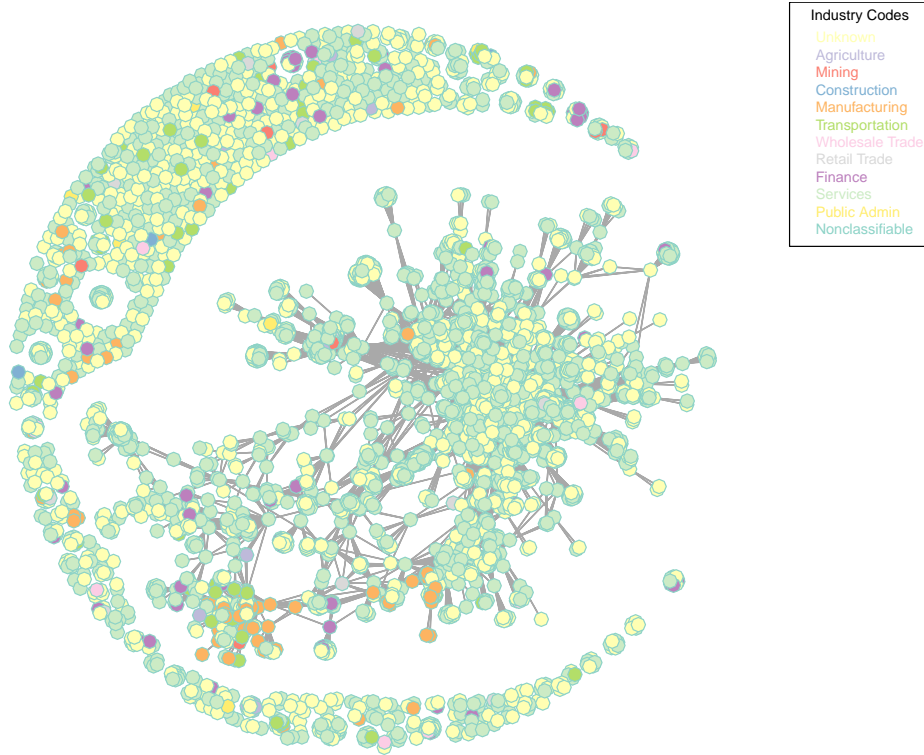
2.1 Exploring the Networks

Who are the key opinion leaders and influentials? Where does influence flow? Who are the “connectors” (those who connect the unconnected in the network) and the “mavens” (who are sought out for knowledge)? Where is the power in the networks? The first major part of the project will look at the evolution of amicus networks from 1930 to the present, but here we have just a sample of our data.

Figure 1 displays the network mapping of all interest groups that have signed amicus briefs on Court per curiam or full opinions from 2000 to 2007, color-coded by industry area. We define the universe by choosing the most recent years of cases available from the Spaeth (1953) data set.² We then go to the actual briefs

²The Spaeth (1953) data has since been updated to include the 2008, 2009 and many of the 2010 cases.

Figure 1: Interest Group Network, 2000-2007



to code every group that has signed onto a brief. We look at the network across all seven years, recognizing that ties between groups will not always be apparent within short windows of time. Specifically, there are 4,111 organizations that signed onto 2,469 amicus briefs on 456 cases in this subset of our data set (see Table 1). The nodes represent interest groups that are linked together by virtue of signing the same amicus briefs. While the linked groups have cosigned at least one or more amicus briefs, the stand-alone groups have signed one or more amicus briefs without any cosigners during this period.

Figure 1 illustrates that there is both a host of coalitions as well as various solitary actors on the periphery of the graph. All of the interest group relationships are symmetric, or undirected, because they represent the act of cosigning an amicus curiae brief.³ However, the mapping of the full network does provide insight into the dominant players.

Table 1 provides some basic properties of the nodes in the network. Various centrality indices, in this

Brief coding has already begun on those cases.

³In this analysis, we have chosen to only link those interest groups that have signed the same brief. An alternative approach would be to link all interest groups that sign a brief in the same direction (i.e., for respondent or petitioner or neither). This would certainly create a denser or more linked network of interest groups based on both issue area and ideological direction; however it would not signify any sort of coordinated action on the part of the signers. Coordinated action is central to our beliefs about interest group networks, because it denotes a deliberate link between organizations. While interest groups undoubtedly interact broadly, an interest group network based on amicus briefs suggests, at a minimum, a regular contact, or a “weak tie” (Carpenter, Esterling & Lazer 1998c). Despite the fact that one of the organizations is listed first as the filer of the amicus brief, to give more weight to such an organization would be inappropriate. Often times the reports are filed alphabetically or in some other manner that gives no indication as to a lead signatory (see also Gibson 1997).

Table 1: Interest Group Node Properties

NODE	MEAN	STD DEV	MAX	MIN
<i>Degree</i>	23.6	29.1	189.0	0.0
<i>Betweenness</i>	4031.1	28658.8	821571.7	0.0
NETWORK	CASES	BRIEFS	COSIGNERS	
<i>N</i>	456	2469	4111	

case degree and betweenness, help characterize the extent to which any particular group plays a central role in the network (Freeman 1979). Degree is simply the number of interest groups directly linked to any other single group in the network. Degree helps determine centrality in so far as interest groups with high degree can be thought of as being directly connected to other interest groups. High degree interest groups are well connected in that they are signatories on many amicus briefs. A high degree therefore signals key groups that bring together other groups on common issues.

In the network, several interest groups signed an amicus brief alone, which means the minimum degree is zero. The best linked interest group, the National Wildlife Federation (NWF), was linked to 189 other groups. Table 1 shows that on average, degree is 23.6, implying that over the seven year period any interest group amicus brief filer would have about 24 cosigners.

Figure 2 presents the top percentile of degree centrality interest groups. Given the multiple case framework of the network, the links can be over several cases and thus repeat players are typically, but not always, those with a higher degree.

Another way an interest group might play a central role is as a middleman between two other groups. Betweenness measures the number of times an interest group lies on the shortest path between several other groups. High betweenness interest groups are then directly along the stream of communication between other groups. The average betweenness ranges from 157 to 4,031 across these networks. Such a large range illustrates that some interest groups belong to large and intertwined networks, while others appear as a friend of the Court alone. The highest number, in this case for the National Association of Criminal Defense Lawyers (NACDL), suggests that removing this organization would have a disproportionately large impact on the connections of other groups to each other. The high betweenness groups revolve around various issues, including: civil rights, mental health, environment, education and technology, as shown in Figure 3.

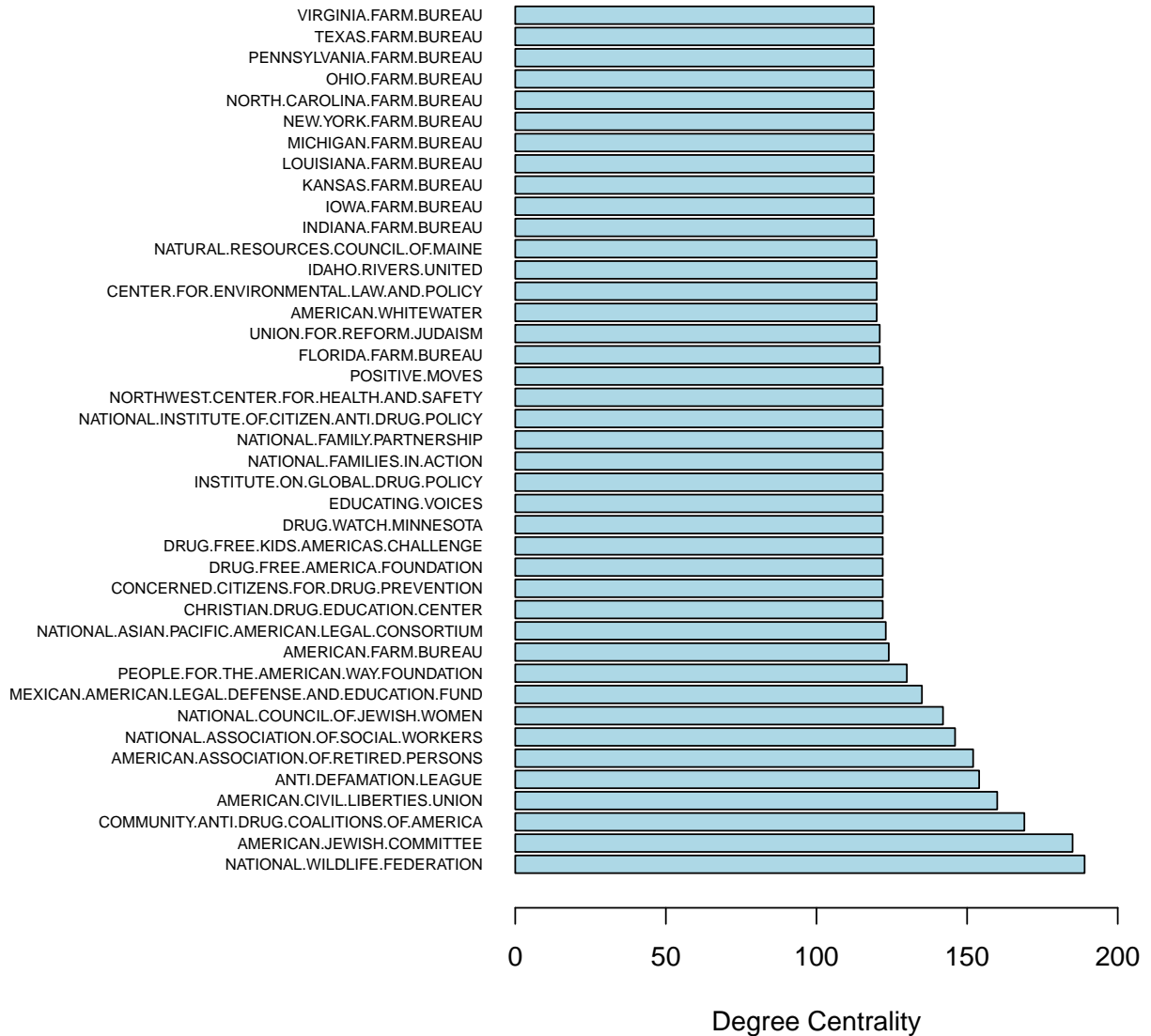
2.1.1 Egocentric Networks

While the average node centrality measures tell us a great deal about the structure of the network, we next unpack the highest centrality interest groups and briefly examine their respective egocentric networks. These are the key players in the network and may lend insight into the common networking practices of successful interest groups. As mentioned above, two common measures of centrality avail themselves to this study. However, these measures (by definition) differed in their selection of the most central interest group. Degree suggests that the NWF was the most central of interest groups. Betweenness suggests that the NACDL was the most central. While the NWF was in the top percentile with either measure, the NACDL was only a central player by measure of betweenness centrality. In typical social science fashion, both measures of centrality are applicable and lend unique insight into how interest groups can successfully use their networks to accomplish their objectives.

Figures 4 and 5 present the egocentric networks of the two central players: NWF and NACDL. It is readily apparent that groups network with others that share issue area interests as well as ideological positions.⁴ Thus contrary to networks built on the LDA issue areas or contributions alone, the amicus

⁴The relevant egocentric network figures are not shown due to space considerations, but can be found in our papers (Box-Steffensmeier & Christenson 2009*b*, Box-Steffensmeier & Christenson 2010).

Figure 2: Top Percentile Degree Centrality

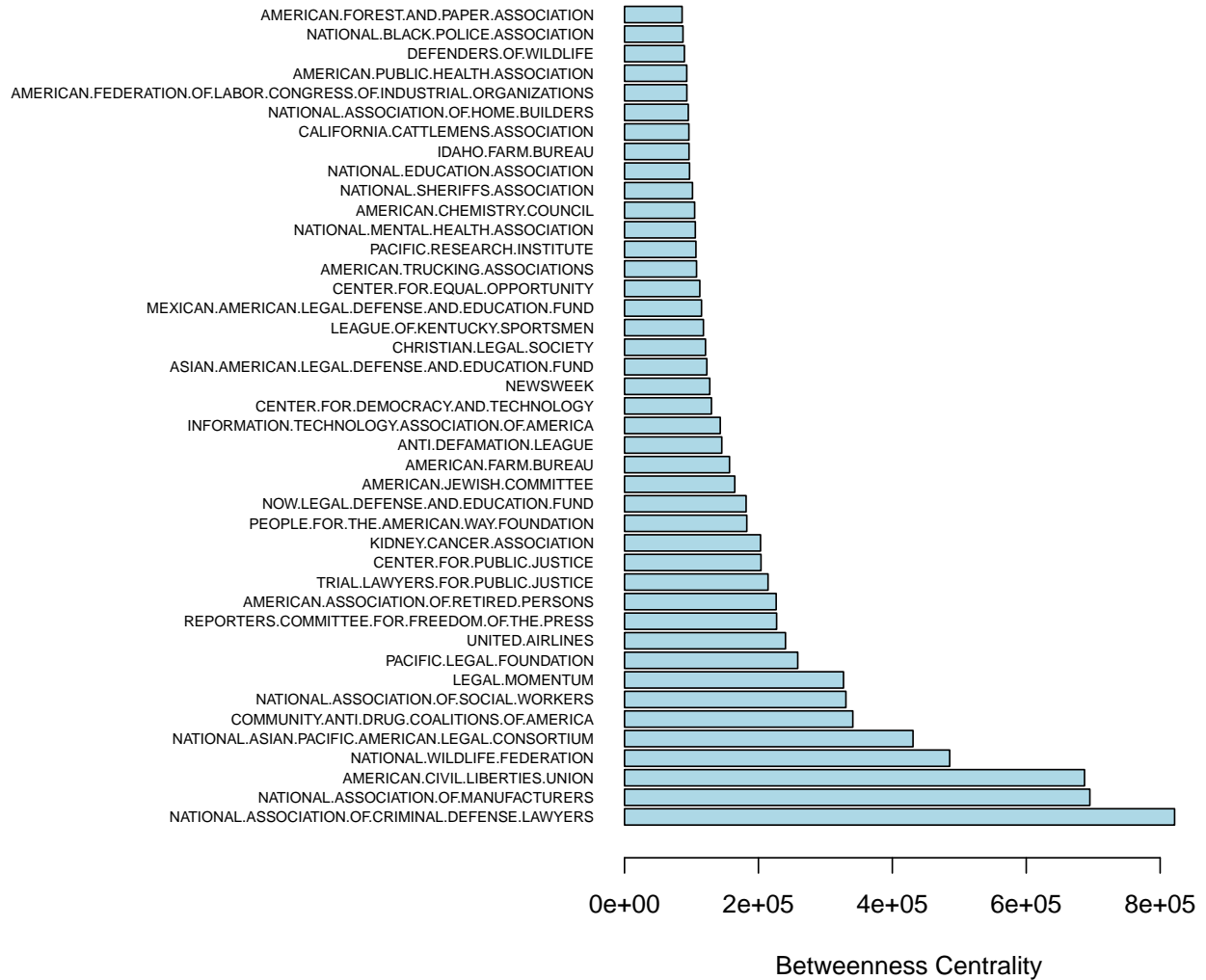


curiae network illustrates links that are based on both issue areas and ideological direction. Furthermore, the coalition strategies utilized by the NACDL and NWF are quite different.

As shown in Figure 4, the NWF cosigned amicus briefs that link various regional wildlife organizations, conservation organizations and more general non-profit organizations, which may share interests and/or ideology. Particularly interesting and the reason why it is a central player, is that despite various clusters in the network, the NWF cosigns widely. Other groups sign exclusively with a seemingly set network of like-minded organizations, illustrated by tight star-like clusters, but the NWF appears to have broad interests in cases before the Court and shares ideological positions with a host of groups. Thus the NWF serves as a hub to tightly linked networks of groups that share a common interest in the environment.

Contrarily, Figure 5, suggest that the NACDL's power stems from their ability to indirectly link a host of seemingly unrelated organizations, which appear to only share a common left-leaning ideology. Particularly interesting and the reason why it is a central player, is that the seemingly broad issue interests in the network

Figure 3: Top Percentile Betweenness Centrality



would not be linked to each other without the NACDL. The network suggests that the NACDL is a key hub organization for various independent groups of a common ideological bent.

Contrarily, Figure 5,

Like the NWF, The American Civil Liberties Union (ACLU) shows up in the top percentile in both indicators of centrality (see Figures 2 and 3). It should come as no surprise to find the ACLU among those most connected interest groups before the USSC. The less obvious point is that it is also among the most central players in terms of betweenness. The ACLU, with its general scope and pervasive influence before the USSC, links a host of interests that would be unrelated otherwise.

Figure 6 illustrates the ACLU's egocentric network. It exhibits characteristics of both high degree and high betweenness. As such, it looks like a combination of features from the previous NWF and NACDL networks. Much like the NWF, the ACLU reaches out to tightly grouped factions, and much like the NACDL it acts as a central hub for diverse groups with less obvious commonalities.

Figure 4: Egocentric Network of Central Node by Degree: National Wildlife Foundation

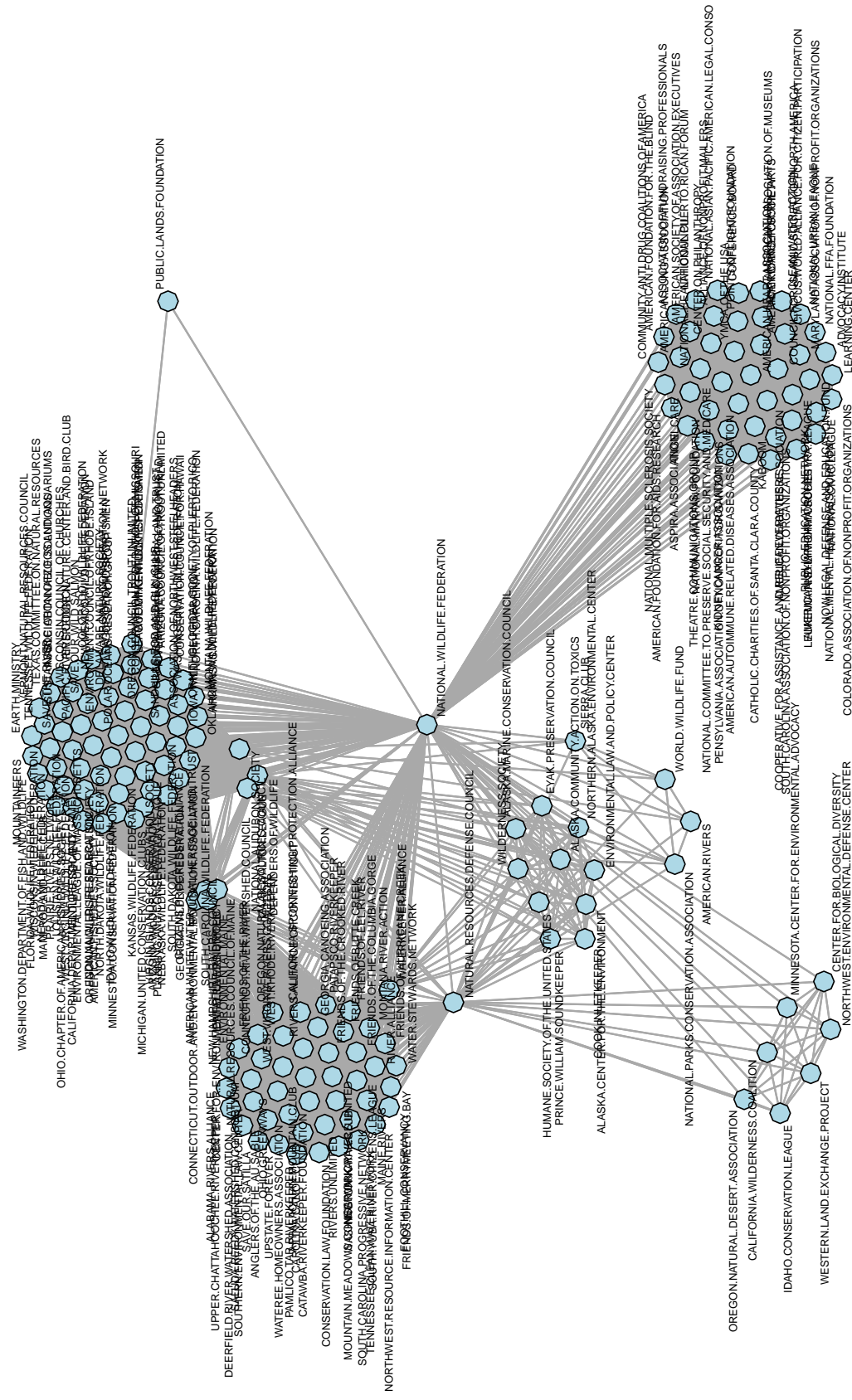


Figure 5: Egocentric Network of Central Node by Betweenness: National Association of Criminal Defense Lawyers

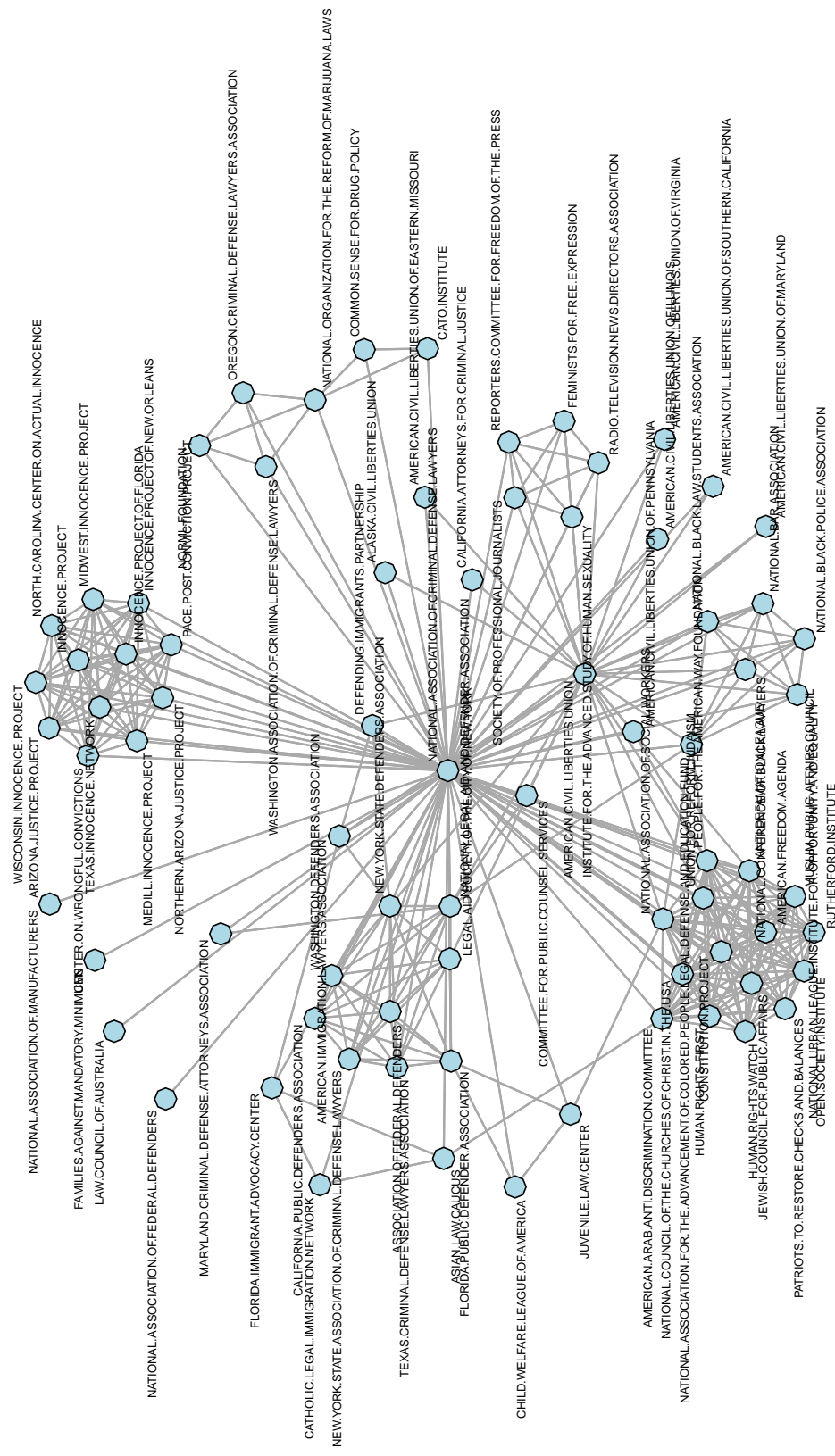


Figure 6: Egocentric Network of Jointly Central Node: American Civil Liberties Union

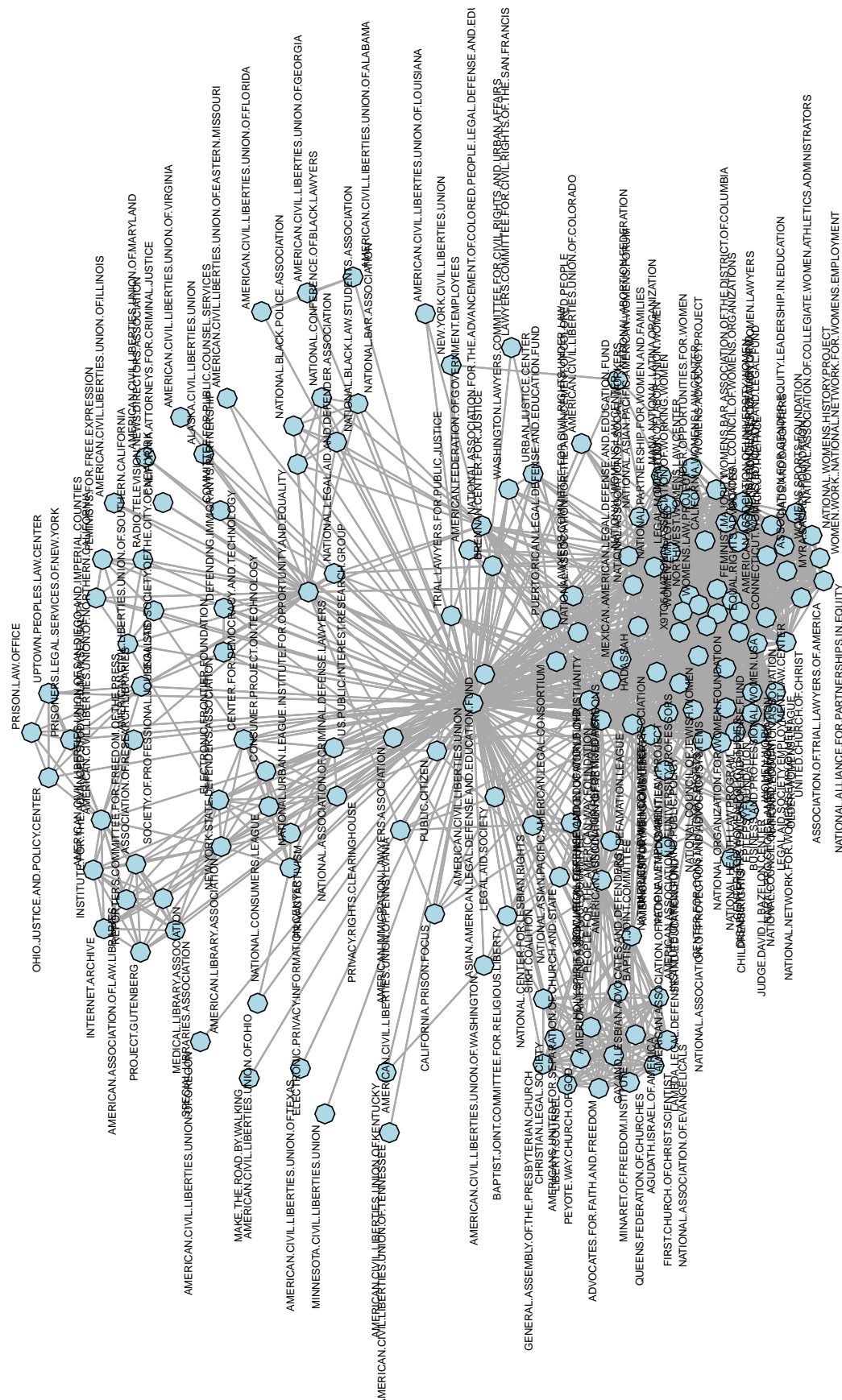


Table 2: Interest Group Network Properties

GRAPH STRUCTURE	Density	Clique	Centralization
<i>Full Network</i>	0.006	0.846	0.040
PURE TYPE			
<i>Clear Leader: NACDL</i>	0.127	0.524	0.896
<i>Teammate: WLDF</i>	1.000	1.000	0.000
HETEROGENEOUS TYPE			
<i>Leader & Teammate: ACLU</i>	0.137	0.597	0.874
<i>Multiple Teams: NWF</i>	0.295	0.913	0.712

Graph structural properties calculated for the full network, and egocentric networks of the National Association of Criminal Defense Lawyers (NACDL), Women’s Legal Defense Fund (WLDF), the American Civil Liberties Union (ACLU), and the National Wildlife Foundation (NWF).

3 Ideal Coalitions & Real Mixed Strategies

The full interest group network escapes an easy characterization. In addition, the egocentric networks of the most central players show that different groups apply varying coalition strategies. The distribution of centrality suggest that both circle and star networks exist simultaneously (see Barabási 2002). Rather than one or the other, clusters of tightly linked organizations, linked circularly and individually, are networked to other clusters by hub organizations, creating a sort of large scale star network. Furthermore, looking at some of the key subnetworks above suggest a broad typology of interest group coalition strategy.

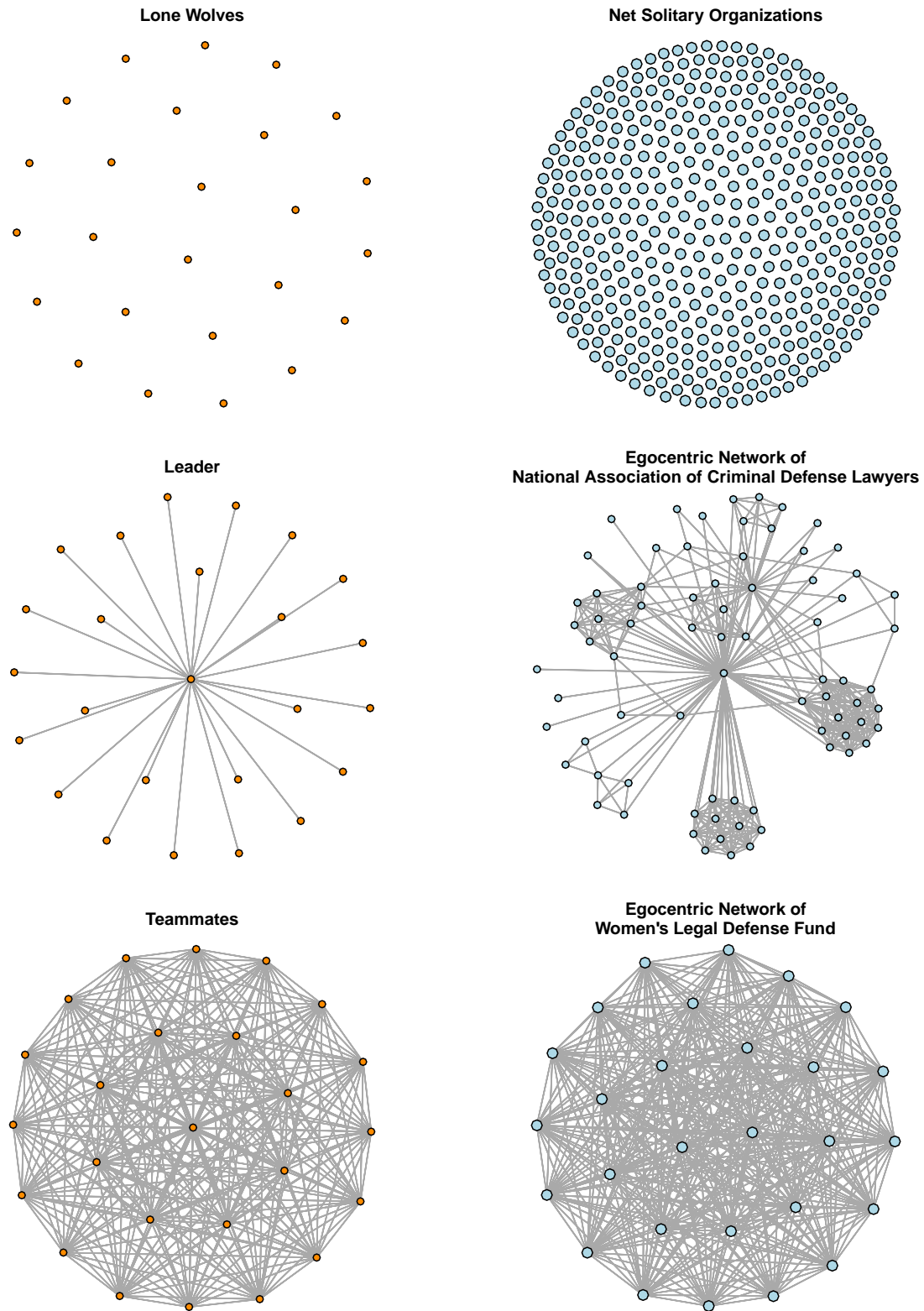
We contend that there is a reference set of ideal types that are useful when looking at interest group subnetworks. The ideal types are shown in Figure 7, in the left-hand column. *Lone Wolves* are solitary organizations that do not work as part of a coalition, but rather pursue their ends alone. *Leaders* connect groups to themselves and function as hubs. These groups take a strong leadership and coordination role between groups that would be otherwise unconnected. Subnetworks formed around such a leader will score relatively low on the density and clique measures. However, these networks are highly centralized and efficient. Finally, *Teammates* are all equally connected in their subnetworks. Both density and transitivity measures are high, while centralization and efficiency are low.

Figure 7, the right-hand column, shows actual groups from the data set that resemble these ideal types. There are a number of Lone Wolves in the data. Specifically, 446 groups, or approximately 10% have no connection to another group between 2000 and 2007. The NACDL illustrates the Leader ideal type well. Table 2 shows that the density measure for this group is 0.127 and clique measure is 0.524, both of which are relatively low. The Women’s Legal Defense Fund is a classic example of a Teammate ideal type. The density and clique measures are both 1.000.

As a point of comparison, Table 2, row 1, provides some similar properties for the entire network. The measures of density, clique and centralization help describe the network. The density of the network is the number of edges divided by the number of possible edges in the graph. In substantive terms, we may think about density as the connectedness of the entire network of interest groups. Density measures for each year from 2000 to 2007 range from .011 to .046, but the overall low .006 score for the entire window suggests that many of the interest groups are not connected to as many of the others as they could be. Interest groups do not coordinate with all stake holders. Thus instead of many weak ties, the networks appear comprised largely of factions.

A measure of clique moves us to considerations of indirect relationships. It tells us the extent to which two interest groups that are indirectly linked by a third interest group, are also directly linked themselves.

Figure 7: Ideal & Actual Interest Group Coalition Strategies



Ideal coalition structures are graphed in orange in the left column. Examples of similar egocentric interest group network structures are graphed in blue in the right column.

This is almost always the case in the interest group networks, which has a clique value of 0.846. It appears that in interest group networks being a *friend of a friend* also means *you are a friend*. Furthermore, for any single year in the 2000 to 2007 window, the clique score is higher than the that of the full period. Thus as opportunities for interest group coalitions increase, so too does the presence of indirect links between groups. In shorter periods, however, we note the greater potential for groups to enter that are part of interconnected relationships.

The general centralization score provides a sort of average value of the centrality of all the interest groups in the network. More formally, it is the difference between the maximum and mean node centrality score conditional on the number of nodes. Here the centrality scores for most of the interest groups are quite similar, resulting in a low centralization index for the total network of .040.⁵

As suggested in Figures 4 and 6, several subnetworks apply a mixed type strategy. The ACLU and the NWF are sometimes part of a team, and other times take the role of a leader. Thus they do not fit easily into our three category typology. Instead they appear to pursue a mixed strategy that employs aspects of both ideal coalition strategies. And looking at the entire network, indeed it appears that most groups pursue such a mixed coalition strategy, though not to the extent of these major players. We also compare the subnetworks based on the neighborhood properties in Table 2. The bottom rows report the information for the ACLU and NWF. Comparing across the four measures, we see that the ACLU plays a role closer to that of a Leader than of a Teammate when compared to the NWF.

This look at network and subnetwork structures motivates questions of structural equivalence. To what degree are different interest groups exchangeable in these networks? And how are the positions of different groups in different cases similar? For example, an interest group may have a position in a network on a case involving patents that is quite similar to a group's in a case on free speech. This work allows for structural theories that generalize beyond issues, which we believe to be a contribution to the interest groups literature.

4 Interview of Interest Group Network Players

The purpose of the interviews was to specifically address questions raised by the National Science Foundation reviewers. The interviews had a significant impact on the direction of the project.

Out of all the groups interviewed, when asked what was one of the main motivations for forming a coalition with other groups, interest and ideology is what pushed the group towards other particular groups. However, in general, the level of influence was the most significant in whether a coalition was formed at all. It is a power play to form a coalition and it is two-fold at that. Not only does signing with many other groups, particularly powerful groups, increase the probability that the amicus brief will be given weight in judicial decisions, but it is also likely to decrease the number of individual briefs being filed. Instead of competing for influence with forty other groups with similar opinions, forming a coalition ensures that an interest group is able to maintain power. As a representative from the American Farm Bureau Federation said, "It is not about increasing power. It is about maintaining power." Over the past sixty years, interest groups have grown both in number and influence within our democratic system. This has forced interest groups once capable of standing out on their own to create new structures, *coalitions*, in order to achieve their goals.

There are numerous other reasons for forming a coalition, mainly cost-effectiveness, efficiency, access and diffusion of information, which comports with the literature. Signing onto an amicus brief, though a relatively cheap way to show support for a legal issue, allows for groups with limited budgets to split the cost between many members. The cost is not always split up equally, those that sign on at the last minute or are on that outskirts of the collaborative process may pay less than those highly involved in developing the brief. For example, one group said they pay nothing for amicus filings, except for the important expenditure of time. Larger, more influential and financially endowed groups may bear most of the burden for developing the brief. All groups tended to agree that lobbying is a much more costly process than amicus signings, so coalitions working in the legislative arena may also vary slightly to incorporate groups that are able to aide in financial support.

⁵The slight outlier across the data is the single year of 2007, which has a smaller number of cases and interest group cosignatories ([Box-Steffensmeier & Christenson 2009a]see).

There were mixed results in the interviews about the level of efficiency in a coalition, which makes sense as our structure theory of networks argues that some groups, particular those with a leader, strong deviation in centrality measures, and less density, are more efficient than others that have high density networks with little variation in centrality scores (teammates). One group, for example, claimed that the level of efficiency was greatly increased through coalition work and our data shows them in a leadership-type coalition with many components. For them, because they have broad interests and interaction with many subnetworks, it is efficient that research is done in these subnetworks that are more specialized and focused on a smaller set of issues. They do not have to waste time and resources researching themselves and information flows directly to them. In return they sign on to many briefs and use their influence to help push issues for the subnetwork groups. Those that claimed that efficiency was not increased via coalitions are likely to be in contact with many other organizations at once and thus the transfer of information must cross many nodes and discussed by all members before an agreement can be made on the final product. One group claimed coordination is vital and constant. That is, groups are constantly calling one another, setting up meetings and emailing throughout the filing process. If all groups have an equal level of influence there is likely to be more debate and coordination among all groups. Finally, accessing and diffusing information is vital to groups that do not have the resources to devote to research in many fields. For membership based groups especially, they gain access to larger audiences by working within a coalition. Letting members know that they worked with influential interest groups in a Supreme Court case may open new avenues of diffusing their message across courts, regional governments and civilians alike.

Some other interesting findings from the interviews were that groups that are far from D.C. and unable to lobby congress directly are more likely to sign onto amicus briefs as a way to gain influence. Many of the people I spoke with were careful to clarify that lobbying Congress and drafting a legal document required very different areas of expertise, thus when filing amicus curiae briefs some groups may be present within the coalition that do not take part in other legislative activities of the coalition. Also interesting to note, but logically expected, networks formed on broad issues may be more fluid than those with a narrow focus. Ideologically they may be brought together for a particular case and never work together again, simply depending on the matter at hand. Conservative groups and/or liberal groups that have nothing in common other than a right or left ideology, such as a women's rights advocacy group working with a transportation group, may work together only once. Groups that have multiple issue areas in common are less likely to have much fluidity and are expected to work together on a long-term basis. Thus there are several small core coalitions that pull in outsiders on a case by case basis. Another aspect of this fluidity is that from case to case expertise matters, thus leadership roles shift. There is no particular way in which a coalition may be formed. Some have existed for so long that one merely gets pulled in when a common issue is at hand. Other times, interest groups that have similar interests will be in the same circle-attending the same conferences, forums, etc. and thus know one another informally, share information, keep in contact, etc. until an case appears that is of interest to them and thus create a formal coalition to work together.

Groups that would not be able to influence congress otherwise, because of other powerful players in the arena, are likely to work with leaders to get their voice out there. Other times, when members are well established on Capitol Hill they seem to work with groups of the same size, influence, resources so that no group receives less credit if there is success. This follows what the quantitative research has shown us with the annual income of groups and those they are connected to.

Two groups that were interviewed were membership based for other companies/businesses. They also have a very general ideology, re: technology companies in trade negotiations and freedom of the press for all media outlets, respectively. Thus, these two groups, though both active in coalitions, rarely sign amicus briefs because it will usually negatively affect one of their members. They shy away from the possibility of isolating an organization that they are meant to represent. Both claim that it is fairly common for two of their companies to be at odds with one another, thus they find it wise to take a backseat.

4.1 Connected Group Questions

The research project proposes that the majority of interest groups primarily partake in coalition strategies with other groups of similar policy interest and ideological character. The factions are tied together by various central players, who act as hubs, leaving a disparate collection of organizations that work alone. We believe that amicus curiae briefs are a prime example of interest group coalitions formed to impact

governmental decision making and policy. Examining interest group networks such as yours will lead to a better understanding of the interaction of the multitude of players and groups in our democratic system. The interview will allow us decipher how yours and other groups perceive the benefits and costs of network involvement.

1. Do you work with any other groups to accomplish your goals in legislative policies?
 2. How do you go about forming a coalition?
 3. What are the most important characteristics considered when determining what interest groups you will sign amicus briefs with and/or form a coalition with (if unclear, suggest perhaps same ideology and/or policy concerns and/or firm characteristics).
 4. How much coordination is necessary between groups when co-signing an amicus curiae brief in the United States Supreme Court.
 5. Do the coalitions you build for amicus briefs carry over to other coalitional strategies, such as lobbying Congress or the Executive Branch. Why or why not?
 6. Do you believe it is cost effective to sign amicus briefs with other interest groups? If so, is this an important factor in determining who you work with? Why or why not?
 7. Does it require substantial coordination to sign onto briefs? Why or why not?
 8. Are the groups you sign on to briefs with an accurate reflection of the groups you would consider to be in your network (networks are groups that you work with strategically to accomplish any kind of goal/how does this group think about the term "network"). Why or why not?
 9. What are some examples of groups you work with most closely that you perceive to be part of your network in accomplishing any type of goal?
 10. Do you believe that the amount of power you have increases through the formation of a coalition?
 11. Do you believe that working within a coalition poses any restrictions on the ideological viewpoint your interest group openly stands for?
 12. What do you believe is the greatest benefit of working within a coalition?
 13. What do you believe is the greatest hindrance of working within a coalition?
 14. Is there a time when you believe working with other interest groups is the only reason you have positively affected outcomes for your cause?
 15. Do you perceive your interest group as having more or less power than others within the coalition of interest groups?
 16. Has your interaction with various groups on amicus signings resulted in two previously unrelated groups to work together in the future? If yes, was it again through amicus signings or in some other way?
- Thank them profusely! If the interview went well, ask if I can follow up if future questions or clarifications arise. Give them my contact information as this legitimizes me and associates me with Ohio State.

5 Interview Notes

The notes are recorded here from the interviews conducted.

5.1 Group 1

It is not always true that legislative efforts are similar to other because of financial consequences. The world of filing legal briefs can be different with the court than it can be with lobbying. When there are common arguments for legal question being presented the group will sometimes sign on with groups it would not work with for other legislative efforts.

The coalition to affect policy change in congress and the coalition of like-minded groups in judicial lawsuits are different. One can have formal coalitions where a bunch of similar interest groups get together and have one voice and other times the coalition only work together as means of sharing information. In the legal area you are all agreeing to a legal argument so it is a different message and much more controlled as far as the message that gets out there to the public. When you file a legal brief you have a council file a brief and every council has to agree to every word in the brief.

Often when they join with other groups for a brief it is the same general industry but other times it can be an issue that affects people broadly like the Clean Water Act and decisions in the courts often affect

many industries. The parties must decide how to share the cost. Each brief, the parties will determine how to divvy up the cost but it's not always 50/50. Sometimes parties sign briefs but they were not the instigator so they do not pay at all. It is a good cost-sharing method and it's also good not to have too many briefs or too much duplication because no one is going to read them. You want to have a certain caliber of council because the clerks at the Supreme Court know who to read and screen for good lawyers. No court has to guarantee they will accept brief onto docket.

You ask the party to file the brief, they do not always say yes and it depends on the politics. If not everyone agrees, you file a motion for leave to file a brief and that's where you ask the court to let you file. Sometimes in contentious litigation a group will have to do that. Generally you can only file in courts of appeals. Most district courts do not have rules dealing with amicus briefs. Coordination varies among the groups for signing briefs.

Legislative coalitions are a completely separate beast than legal coalitions. You can't sue someone in congress and you can in court.

Legislative coalitions are often very impersonal and behind the scenes. There are these coalitions that are so behind the scenes that you do not know who the members are. In the legal arena it is very transparent. Groups are trying to convince a lot of people that their legal argument is superior. Lobbying is a bit more subjective and you are not bound by judicial precedent, it is all politics. When it comes to down and dirty legal arguments, it is a lot more straight-forward than. Political and legal goals are different even if you see similar groups working together. It also depends on the type of lobbyist, if you have those that work in house versus those that are hired outside of the organization and you are their client. A lot of big law firms have lobbyists that work for clients on their behalf and those would probably be the types of coalitions I'd have in mind for the project.

Coordination varies depending on the case being determined at least in regard to judicial coalitions. Some groups may want to be very involved in the research and writing of the brief and sometimes they may just agree with a group and want to sign on. The amount of coordination also affects the amount of money usually paid by these groups. It is also wise to sign on with other powerful groups with wise council because it's very political which briefs are read and which are not. Groups that are connected with well-known council will be more likely to have their brief read and make it to the docket.

Because lobbying and judicial coalitions are different and come together in different ways, coordination for lobbyist efforts is not nearly as strong and the coalitions do not carry over to other coalitional strategies.

The groups that sign onto amicus briefs do so because of the constitutional or legal relevance of the question, not necessarily for agricultural interests so signing on to briefs is not necessarily an accurate reflection of the groups they consider to be in their lobbyist network, and amicus signings, though sometimes a few groups stick together, can be much more broad because a legal question is in effect broad

Yes the amount of power increases because if too many briefs are filed your power diminishes. It's not so much you have more power as that you keep it

They do not believe their group in particular can take responsibility for affecting legislation because of an amicus brief but they'd like to think that had a positive influence based off sound legal arguments that may have changed or showed good favor to the judges but because that's never said one way or the other it's difficult to claim to be the sole reason for the decision in a case

Their interaction with other groups on amicus signings constantly brings different groups together whether it simply be information sharing or signing onto a brief in another case. Because legal coalitions are more open and honest about their work it is not a problem to sign with many different groups and is best to be in contact with many.

5.2 Group 2

This group works with other groups constantly. They work with other groups on amicus briefs and on legislation. They work with other groups on litigation too. With amicus briefs it's not always the same groups because the groups they work with for amicus briefs usually specialize in litigation and those groups typically do not get as involved with legislation. They are interested in both areas and they are a very small organization but are interested in both litigation and legislation areas that affect their area of interest. The groups that sign in legislation are usually not groups that write briefs and vice versa.

The groups are different because you can only do so much as an interest group and it is a very different kind of expertise to write a brief as opposed to lobby. The people who write briefs are almost always lawyers and it is a very specialized, technical kind of activity. You have organizations that do litigation that tend to be more regional in their focus so they will not have a Washington, D.C. presence.

Because they are close enough to D.C. they are able to lobby as well as sign amicus briefs but not all groups can do this and those are typically the organizations that they sign on with in briefs. The groups they work with on the hill are not the groups they usually work with in filing amicus briefs because those groups do not file amicus briefs. For whatever reason, they focus on lobbying rather than litigation.

There are a few ways you can go about forming a coalition. A less formal: over time they learn who people who are interested in similar interests as their own, in this case civil rights issues. They know who the organizations are that are like-minded and they know the people personally that are involved in those issues. They are constantly talking to one another about cases and other issues that pertain their interests so when a case comes along the groups are in touch with one another. This is kind of an avenue that is driven by having a subject matter of interest in common. You also have conservative groups that get together periodically to talk about common areas of concern even though they may not deal with the same specific subject matter. For example they do not deal with property rights issues, yet if the group has a similar conservative ideology they may work together on a particular case. Some other organizations sign a lot of amicus briefs so when you get together to talk about common philosophical issues you may also start talking about overlapping issues that involve litigation. Organizations that host these conferences have all group's contact information so they are logical clearinghouses when cases come along that may be of interest to a bunch of smaller organizations they can circulate the information. The way that amicus filings have coordinated has become more formalized and better structured over the past few years. Ten years ago the only way they could find out about briefs would be from an informal case by case basis.

The group claimed no coordination was really necessary. Sometimes it's desirable to have less duplication of efforts but there's no rule that says you have to be coordinated. The amount of coordination that is desirable varies from case to case. If you have a complicated case that involves a lot of different issues, it's more desirable to make sure that all the bases get covered. If it is simple there is not as much coordination necessary.

Working in a coalition is definitely cost-effective. They sometimes pay for the filing costs and those kinds of out of pocket expenses but in recent years they have not. They find a litigation organization wanting to file a brief that has all the logistical support there and ready to go. In turn, those groups are happy to have the group join because it gives the brief more weight and they also improve the brief because they have more expertise in different areas. It requires an expenditure of time more than anything else. In exchange, they are able to help persuade the courts to make a decision in their favor. However, you have to be pragmatic about which cases you sign onto. When affirmative action was argued in the Supreme Court, it was central to their mission to create a coalition. There were a huge number of briefs on the opposing side and relatively few on their side and so they got together with a couple other organizations and split the cost. This was cost-effective but it may not have been so if it were a lower court case that was not directly pertaining to their interests.

Even though the groups are different for amicus and legislative efforts, they are both based off of ideologies and interests of the group. In the area of affirmative action, it is extremely rare for there to be legislation where a liberal group is going to be on their side. It is like a coalition with anybody, formed because you have the same ideology. You may have strange bed fellows for some case that may be allied on a particular case. In cases that involve more procedural and non-substantive issues, statutes allow attorney fees to be collected from the opposing side upon winning. Typically, each side has to pay its own lawyer win or lose but in the civil rights issues you have fee-shifting where you can get the other side to pay if you win. If you have a case go to court where the issue is how to calculate attorney fees in this case, it will apply to both liberal and conservative groups so they'll sign on together. You'll get strange bed fellows in that case because it is more cost-effective to work together but only because they have a common interest.

On the legislative side, the group they work with the most is the Heritage Foundation. On the litigation side the two groups that they work with the most are the Center for Individual Rights and the Pacific Legal Foundation.

The amount of power and influence increases through the formation of a coalition. They are a small organization so it would be difficult to contact all senators or legislators. It would be difficult to do brief

writing and filing, particularly since it is a big logistical deal to write a brief. What they bring to the table is experience in civil rights issues so if they can find someone that has the kind of infrastructure in place to do the filing that they cannot, they will be able to give the expertise to the other group and everybody wins because they pool resources where they both excel. The product is more persuasive as well because you speak for multiple organizations without increasing the costs. They have more influence over the courts.

When there are a lot of people working together there are always hassles to get people on board but for their particular issues that rarely happens. However, there was one case not long ago where he did not like the amicus brief being written. They took their name off the brief and put their name on another brief instead. It still ended up being worth-while to sign on to any brief. Even though they did not sign with the one they still improved it by providing their expertise so no one really lost. Some organizations may be jealous of one another and do not want to have other organizations on their brief because they compete with one another for funding, but it is not an issue with their group.

Working with smaller organizations in state organizations and bringing them into amicus briefs has caused them to be in contact with other important agencies in D.C.

The group couldn't answer whether or not they had more power and influence than others in the coalition. It varies from issue to issue and it varies from organization to organization. When they all sit around the table, what he says may more weight because he knows more about a particular issue, but when the letter is sent to a senator he may be more impressed that the Heritage Foundation is on the letter. Influence really depends on how you look at it and this situation may be flipped around in regards to a different issue.

It is helpful to him to have access to other people's thinking and expertise. He learns a lot from being part of a coalition and even if one has a lot of expertise there are things out there that he/she may not have thought of or information he/she did not have. You have more influence with outside organizations but it also improves your message. It heightens your influence and credibility in the court both qualitatively in the sense that you have a more powerful message, but quantitatively that you can speak in more venues, more courts, contact more legislatures, etc. Courts do not tell you precisely which brief influenced them, but for instance, one brief that they joined last year was cited very favorably in *Horne v. Flores* by the judge in his decision. Other cases, you see the arguments that you made being followed by the court but your brief was not necessarily cited so you do not know whether the court relied on your argument or not. Sometimes there is pretty good evidence that they were if no one made the same argument as you or as well as you there is a good chance that the courts relied on you but a lot of times they are reluctant to cite the briefs. With legislation you can be surer that your coalition had a specific influence because you write and let them know what you want.

5.3 Group 3

They work with numerous groups on different projects, both for legislative and judicial projects. They find it effective to have numerous coalitions joining in on current core coalitions. Many coalitions are pre-existing so coalitions are not necessarily formed.

Interest groups join together because of ideology and interest. The reputation of organizations are also important. They do not want to work with groups that have a bad reputation or are outrageous. They want to work with those that have a large following because that gives them more venues to get their message out. Whenever they work with these groups it's likely that they will have more people listening to their message but also more professionals that will be able to help with all of the different requirements of lobbying-funding, research, media, etc.

Groups they work closely with are those that are against illegal drug use and promote policies that enforce more effective drug punishment and prevention in use. They have different divisions that focus on different aspects of drug policy but they work with any kind of group that will put an end to drug use or promotes education to children/families/companies. The groups they work with can be seen "in broad daylight. They are the groups that are on the amicus briefs with us."

Some people just sign on to briefs so not much coordination is necessary and some are primary coordinators. If it is an area of their expertise they may coordinate more than other times.

Coalitions for briefs carry over into legislative efforts because amicus briefs are just one aspect of coalitional efforts. Thus, the information from the groups is beneficial in other sectors of getting lobbying money. Amicus briefs are an easier and more inexpensive way to voice their opinion but are definitely just one arena

where the coalition is focused on working. They constantly work with members of congress to make their interests known but when they fail they have another arena of the federal government to turn to, which are the courts.

Coalition work isn't always cost-effective. If you have attorneys that are willing to be cost-effective and take the filing and funding costs on, it is more cost-effective than working alone otherwise it does not make a difference. It's not necessarily a factor if there is funding.

The amount of power you have increases because it broadens space and voices. The more voices that are heard, the more congress is willing to look at the gravity and influence of the case. The group itself looks more important when it signs with other groups. If powerful groups sign on with you a great deal of the time you look more powerful because the powerful group seems to think that you are important.

One of the hindrances of working in a coalition is that you have to make sure that you are not stepping on other group's toes when you hold a position. It poses some problems on their interests because of the importance of the coalition in changing legislation. You have to determine what is more important, being steadfast on a position that is not of upmost important to the organization and stepping on some peoples toes or conceding to the views of the coalitions

The broadening of viewpoints, more viewpoints, more support, grassroots support for the amicus are the most important benefits of coalition efforts.

The medical excuse marijuana movement was a time when the coalition was the sole reason for success and had they tried to work on their own they never would have gotten legislation passed in their favor.

In the coalition they have more power than some and less depending on the position of case. They all try to work together and take the leadership roles at different times. They are all in the movement together so they will be asked to take on a more powerful role when they know the most about the issue and it will benefit the whole to step back and let them take charge. Other times, when they do not know the most they will take a back seat. They coordinate less with other groups when they do not have as much expertise and are involved in a lot of the coordination and bringing in groups to the coalition when they have a leadership role.

Some groups did not know each other and they have brought them both in amicus signings and legislative efforts. Because they spearhead a lot of drug coalitions, they are constantly trying to bring new groups into the coalition and when they take a backseat on some cases, those groups that they brought in at earlier times are asked to come back by groups that are now in a leadership role in the coalition.

5.4 Group 4

They work with other groups very often. They work with a variety of groups because they do not have enough resources to wage the battle against things going on by themselves. They don't have the money to do these things and even if they did, if you had one hundred groups out there that are working on the same thing that you are and have the same belief as you, it is crazy to have one group to do it by themselves.

They form the coalition easily because there are organizations that believe what they believe. They are against the death penalty so they find groups that feel the same way and they work with them (Amnesty international). Some of the relationships have been formed through friendships and meeting other groups through different get togethers.

It is definitely cost-effective to form coalitions. In trying to wage a battle against some issue in some society, when you are working ACLU or Amnesty International or any other organization, it strengthens your punch and you have much more influence than you otherwise would have. This is the greatest benefit of working within a coalition.

The coordination is very easy for them and they have been doing it for a very long time. Usually the group that has taken the lead on the brief will reach to groups like themselves. They ask a few questions, read the brief and sign onto it. All of the preparation and money for it has already been taken care of.

Yes the coalitions carry over from judicial to legislative areas. They send letters to congress or the executive branch but they cannot lobby because they are a federal organization. The coalitions go beyond the brief. Working in coalitions has much more benefit than just working together on a legal brief.

Ideology and interest are the sole reasons they work groups in a coalition. Sometimes they come together because they have a common concern with random groups on a one-time basis and other times they work with groups constantly because they have many issues in common.

The amount of power that the group has increases through the formation of a coalition. The work on the death penalty in the country has been highly influenced by the coalition they are involved in. Their coalition has had huge influence in getting rid of the positive perception of the death penalty. It comes as a result of meeting and talking with people and sharing information. You have to be able to engage with multiple people to get the information out there to many people.

For this group in particular, there is no hindrance to working in a coalition. You understand from the beginning why they are coming together so if you do not believe in the benefit of working with the particular groups you are working with there is no point in doing so. If you do not believe that putting an end to the death penalty is important, you should not be sitting at the table. The people that are responsible for the logistical work usually reach out to people that are in lock-step but if you want to be on board, it is left up to you to ask to be a part of it.

Power and influence within the coalition depends on the issue at stake and who has the most expertise in the particular area. Power varies from case to case.

In terms of the greatest benefit, you cannot get around the economic component but in coalition work you find out that you are not by yourself and you have a lot of people that are with you on all of these issues.

5.5 Group 5

They work with legislative and lobbying coalitions in general. You cannot take names from briefs and say that those are the legislative coalitions group for group but the ones that may not be in the legislative coalition are usually those that are not big enough or not based in D.C. so they use amicus curiae briefs as a cost-effective way to show their position on a particular issue.

Amicus briefs are usually signed for cases involving civil rights, minority rights, women's rights and lesbian, gay, bisexual and transgender rights. They always work with other groups. Some coalitions are more effective than others but regardless they rarely do work outside of one of their coalitions. Sometimes this makes it necessary to distinguish their position from a particular coalition. Health reform is an example, as some groups that they work with to pass health care legislation are religious groups while they promote the reproductive rights of women.

They find coalitions to get involved with by word of mouth because coalitions have been around for so long. They do not usually form coalitions, rather than join them. They talk with other interest groups they've worked with in the past and people in the community that may want to join in on a particular issue. It is important that they find groups that have strong suits in areas that are beneficial to them. They need to be more than credible, they need to either be able to provide funding, research or legal advice for the coalition that a multi-interest organization cannot do on its own.

Ideology and interests of other groups are the main determinants of who they will ask to work with them in the legislative and judicial arenas. Other qualifications (listed above) are secondary to this consideration.

Coordination between groups is vital. There is constant contact between members via phone, emails or meetings. Grassroots and affiliates provide links in other states to affect legislation there.

Networks and coalitions vary depending on the particular issue at hand because they are a multi-interest organization.

The inconveniences of coalitions are that they have to all agree on a position, strategy and policy prescription. Every group wants to get credit for the work that they do and there is a lot of pressure to exist and maintain a strong influence. Smaller groups may not be visible within a coalition which can be challenging politically (if the group is not known for its work it will have a harder time affecting legislation in the future). Work goes slower when there are so many different personalities working together. It is inevitable that people will clash so the larger the coalition the larger the chance of pride and other personality characteristics getting in the way of work.

The benefits are credibility and increased effectiveness. A lot of groups that they work with are research groups with no members, unlike their group. They can use the research and give that to their members which is beneficial for the unknown research group and their group at the same time. Division of labor is key to getting anything done on Capitol Hill. Members of their organization can then talk to their representatives because the constituents are very effective in letting their representative know what matters to them. Strengths are combined.

In terms of power, some groups function better than others and some are loosely held together with no power. The whole point of a coalition is to work together so even though they will take a leadership position on some issues they do not want to impose their perspective on other groups or use their power to do so.

They have brought other groups together because they work with so many. Because they are a focal point that draws in various groups for legislative purposes, they introduce many unconnected groups to one another.

5.6 Group 6

They work with other groups in legislation. They do less amicus signings. They go about forming a coalition in many different ways. Sometimes they are the driving force and try to start a coalition themselves. Sometimes a partner organization reaches out or other groups approach them. Coordination is necessary. There are a lot of different models. It depends how active the issue is that you are working on and what the time frame is. You do anything from trying to have weekly phone calls to having weekly in-person meetings to having a formal structure where you have a campaign with shared staff and fundraising. You set up another organization jointly that is run by the coalition partners and does its own fundraising.

In deciding who to work with, characteristics are considered based on what they need. Usually it's what they bring to the table in staff resources and commitments or whether they seem to know important people or have connections that they find useful. It could be whether they can help raise money or can reach out to other constituencies. A lot of times you want the coalition to have consumer and labor and environmental groups that fit into a class that they do not fulfill themselves. There can be some variation but they must be within a range of the same interest or ideology.

It is cost-effective to work within a coalition oftentimes because they can achieve a lot more together than they can alone. Sometimes you wish you could snap your fingers and everyone could get away from their own biases or there were not so many groups. If they were more consolidated under slightly more groups they might be more efficient.

Generally speaking they have more power. You bring more information to the table and you have more constituents. You can accomplish more in every arena. Within the coalition structure itself, it depends how much individual power they have. Their power is rarely diminished but the amount of credit that they receive can be diminished. If you are concerned about getting credit for what you are doing by the public or on Capitol Hill, depending on the arrangement, you can get more or less as a group because there is petty quarreling about those types of things. Generally, as a whole, you get more influence.

They are not willing to compromise their position much, at least not on ideology or policy, more so on strategy. The coalition hinders them in that way but not in the ideology they openly stand for.

The greatest benefit of working within a coalition is being able to accomplish a lot more, you have more reach and you have an enormous amount of influence that you would not otherwise have. The greatest hindrance is that it takes a lot of time and effort. One of the most shocking things about working in front of organizations in D.C., is the amount of time spent working with other groups and communicating with them. He often spends more times working on relationships with other organizations than policy makers. Almost everything they do is done in coalitions so talking to other groups is the main part of the job. In everything they do they work with at least one other group. You cannot avoid interacting with them. Everybody has to cooperate to some extent and if you are doing things other groups do not like you are going to hear from them and vice versa.

They are a highly accomplished litigation group with ten lawyers that work a lot in the Supreme Court but it is a different division of the department that is actually representing the parties instead of signing amicus briefs. Most amicus briefs are not very useful and people are not very interested in them or make academic/messaging points to influence the case. They do less signings than most other groups because they do not see them as being very valuable. They do not think signing on to a brief makes much of a difference. Anybody can write an amicus brief so there's nothing really special about writing one unless you actually affect the income. It often sounds good to funders and members but a lot of time it does not affect the members. Their litigation group has run a project that looks through all the civil petitions to the Supreme Court and assesses their likelihood of being accepted and their influence on civil rights and they reach out to the people and offer to help them. People often end up taking their help and they do anything from giving the party advice, move the argument to court or help write the argument. They have extensive experience

with the Supreme Court for a shocking percentage of the docket (around twenty percent of the cases before the Supreme Court they had some say in). A lot of the people you are helping, you want to keep out of the Supreme Court, arguing that the court should not hear the case which is often the best thing you can do to help people. He cannot remember specifics but they have definitely brought groups together because coalition formation brings about other coalition formation.

5.7 Group 7

They constantly work with other groups in their legislative efforts. They have thousands of meetings with various groups throughout the year. She cannot remember a day when she did not have a phone call with another organization regarding some piece of legislation.

Their core constituent groups are like-minded in their efforts for freedom of the press. The group is often asked to sign amicus briefs that are not related to the media but because the committee is unique in its efforts it has to consider the repercussions of taking a position on any issue. The only exception to this was after the September 11th attacks where they signed a brief in an effort to get the names of the 1200 detainees that were locked up (CNSS v Ashcroft). However, they also work with non-media interest groups for legislation involving freedom of speech. 95

The amount of coordination necessary is exhausting. The group is a group of lawyers to they do the research, writing and other organizational aspects of the coalition. They make sure that all groups see the brief, agree to it, and sign. This is the same when commenting on legislation.

It is ultimately more cost-effective to work within a coalition. There are filing and printing costs that the group deals with more-so than other groups because of their legal role within the coalition. However, because of the prestige of the group, others will often ask them to sign onto a brief in return for covering the costs. In the long run groups come to you to sign for free so everything evens out.

They are very pragmatic about who they form a coalition with because they do not want to isolate any constituent they already have. They have to be careful who they get involved with. Because they are so pragmatic they often take on a leadership role within the coalition. They are well-respected and known as first amendment advocates. They have a lot of power within the coalition without having to force it on others. Their reputation allows for this. Other groups usually go to them for help with an amicus brief and not the other way around, thus they do not have that large of a role in introducing new groups to one another. Their leadership role stems from the fact that they are the only group that provides legal assistance for all media organizations, not just radio, television, etc. Amicus briefs are an accurate reflection of their networks in other arenas of legislation and work on Capitol Hill. However, because they are a group of lawyers they cannot lobby congress directly and usually take more of a backseat.

Restrictions arise because they can't work with a lot of groups because a reporter is covering both sides of the case. Sometimes groups take all the credit for the work that the coalition does and reports it back to its members. It is hard work to maintain relationships and its time consuming. People have personalities so this can cause conflict.

Leverage is the biggest benefit. Strength and credibility are also increased. They are not a membership-based organization so they provide the research to those groups that do not have the time or resources to look into the legal arenas of an issue. In turn, when they work with well-known groups their position seems more credible. After all, when groups that represent various constituencies come together, their position has to be taken more seriously. Contacts have different positions that can provide different services so there are no duplicated efforts.

There are definitely times when working with a coalition is the only reason legislation passed. Shield Law was affected by the coalition. Their sub-group was responsible for FIIA passing. They went to Senator Webb and Warner saying that 70 companies want it passed and it did.

5.8 Group 8

They work with other groups both with amicus briefs and other ways of speaking out against particular policies. They sign on mostly on for civil liberties cases whether they are right or left wing.

They believe they need to sign onto a brief whenever civil liberties are at stake. They are asked to form coalitions because they have a well-respected name. Both the ACLU and the Constitution Project ask for assistance a lot, which are both right and left wing.

Ideologies and interests determine who they sign briefs with.

With the Constitution Project, they have a lot of meetings so a lot of coordination. With the ACLU they work on drafts but that's about it.

The power and influence within a coalition depends on the issue. He signed on yesterday to letters to the president about oversight committees that should be monitoring what the president is doing. Groups carry over if they have to do with civil rights. Groups tend to be similar both ways but because they work with different political wings it's not a set coalition.

It is cost effective both financially and with human resources because it takes less time to have someone work on the brief alongside you. It becomes expensive mainly in the printing. It is a cheap way to affect public policy. That's why coalitions do briefs because whoever is in the same brief is important to what gets read.

Their power increases as a whole. The coalition does not pose ideological restrictions unless they are not liberal enough. They tend to be more liberal than some groups. The perception is that they are more republican than they are. It looks like a bigger effort when they sign with ACLU. People profile the group because of their religious efforts. They, however, go farther left than most groups.

Influence is the greatest benefit of forming a coalition in courts. They sued Rumsfeld quite a bit. When their group and 40 other groups sign together they have a bigger influence and the SC has to take their position seriously. If you've got a coalition aligned up in one stance you have to pay attention. When all you are seeking to do is oversee what a group is doing when they do not do their job it's better to be in a coalition. There are not a lot of hindrances but mostly just bureaucratic "hooblah" you have to take part in.

They believe they have more power than other groups in briefs have connected new groups. The constitution project really brings people together.

5.9 Group 9

This group represents technology companies and businesses in trade negotiations. While treaty provisions are being considered with international companies and other countries it is important to make your voice heard in Congress which is what the group does for its constituents. They work with other groups constantly to achieve this. They never work on their own because it is inefficient, more costly and less is achieved for a smaller positive outcome. It would be unwise not to be part of a coalition.

Coalitions are different for the international and national scale within the company. According to the interviewee, those groups based in DC tend to cross federal and international coalition boundaries while those in other countries are purely international and affiliates in other states tend to work within a coalition on the federal or state level where their voice can be heard. The coalitions also vary depending on which treaty/country is being affected by provisions.

Coalitions are formed by joining with existing groups. At this point coalitions have been around for so long that it is rare to start a completely new one. For every issue the group will simply contact groups they've worked with in the past or those groups will approach them to join forces. They also meet new people/groups for the future. Because the interviewee has things in common with people he works with they are in similar social groups. He meets people this way and then he can contact them for lobbying considerations. He calls them, they set up a meeting and then work together to decide how to approach a subject and who should do what in order to be most effective. Distribution of labor/resources/funding is vital. Throughout the process they maintain contact with one another to track progress and seek advice.

Congress is approached by people constantly, all with different interests so coordination with groups that support your position gives you the perception of more power and also makes it seem like you care more about each issue. If people on the other side of the position seem to have more power/influence/passion then they may get the funding and you may not. Because they represent industrial companies, they must be organized and efficient otherwise jobs and progress are at stake.

Amicus briefs are not common for this group, at least for the interviewee that works on the international coalitions. They are more engaged at the policy level of issues. If member companies are going to court, they

will sign a brief on their behalf but because they represent so many companies and because of the nature of the companies, it is usually one of their members against another so getting involved can be problematic. It is cost-effective to work with a coalition because it mobilizes knowledgeable people and allows them to divide tasks. Then they can reach out to their member companies for support so they do not constantly have to pay for the costs of lobbying. If the issue is focused on the industrial sector a coalition is harder to form. Coalitions are always and only formed on the basis of interests and ideology, though they differ based on every policy issue.

Power increases greatly!! This cannot be emphasized enough. They allow the body to create the perception of a general will of a large number of people. For example, the Central American FTA was only made possible through coalition work. It would not have been passed otherwise. Congress members have to know what their constituents want if they are going to vote a certain way. The easiest and most effective way to do this is with a coalition. Thus, their power is greatly increased. China's approval for trade relations was also approved because of business coalitions.

Information sharing is another benefit of a coalition. It provides better service to members by giving them intel about what's going on in D.C. Business decisions are based off more accurate and complete information. More information can also provide opportunities for education programs for member groups.

Some hindrances are that each group does not stand out so it is hard to claim credit to members. If you compete for membership and funding this can be an issue. If the coalition is looked at negatively it may be hard to be involved.

This group does not sign amicus briefs because legal issues are specific and hard to get membership-based organizations to all agree. It is also not the most effective way to deal with policy. They want to deal with a policy before it goes to court, not after. Companies compete in the market that this group represents so it is not usually possible to take a stance on a specific issue. (It is usually two of their groups in court that are on opposite sides of the issue. Fight in the market = fight in court).

5.10 Group 10

They work with other groups in various coalitions. They have their own objectives when forming a coalition but they work with people that align with their interests in amicus briefs and legislation. Groups carry over from the judicial to legislative arena.

In forming a coalition they work with groups on a number of issues so when a bill comes up, past relationships determine who they work with on the current issue. They have a listserv of other groups who may want to get involved so the group will call/email them and set up meetings to discuss the issue at hand. They discuss lobbying strategies. When a threat is recognized one group takes the lead to talk to others and they all recognize a common interest and take it to congress afterward.

They work with other groups based off ideology and interest. They also consider who has the capacity to influence congress in what area, what people can bring to the table in terms of finance and research. Sometimes other groups can do things that this group can't (field work, etc.). They enhance and expand the message they bring to congress. i.e., conservation and development can go hand in hand (CARE organization) when this group, a conservation organization, joins development organizations. Then congress can be influenced to vote in this group's interest, believing that conservation is economically efficient. Broad interests with one message are more influential to congress because it appeals to their natural business and economic sense. Power and influence increase because the message has more weight. A wider spectrum of law makers that appeal to different constituencies can vote in this group's favor.

It is cost effective to be part of a coalition and the burden is shared by more people. You can take many roles within a coalition depending on who has the most knowledge on the particular issue. You can be the leader, follower or a free-rider that does little work within a coalition you just merely sign on for names sake. Letters are sent to congress with multiple signatures from multiple groups. There are so many issues constantly being proposed to congress that are important to this group either pro or con so always having to do the work would be impossible.

Some hindrances are that compromise is necessary. Also the issues are usually broad so it may be necessary to compromise their view on a particular stance because the bigger picture is more important. I.e., if they did not compromise and form a coalition a more well-formed coalition on the opposite side of the issue may get the funding or passage of legislation which would be worse. There have been times when

they've had to quite down their own ideology for the benefit of the coalition. It is always hard but sometimes it is necessary. It is just a matter of determining the costs of benefits of appeasing or not.

Coordination keeps the line of communication open. Someone always has to take the initiative of doing so. Leadership roles vary from issue to issue. Some groups are designed specifically to create coalitions so they take the lead on broad policy issues because they know so many groups and have the means to behave bureaucratically, which is sometimes necessary when so many personalities and interests are brought together for one purpose. This group's voice is dominant in a variety of coalitions and because of their prestige they've been able to influence various groups to join in on coalitions, which in turn have met other groups that have worked together in the future. Mostly introduce environmental and development/business organizations for green business efforts.

The biggest benefit is access to more information. On Capitol Hill you have to stay up to speed or you'll be left behind. A coalition can make one call to Congress instead of each group making its own call and angering and frustrating the members to the point where they no longer listen or take your calls. Coalitions can also turn into national campaigns reaching more people across the world to take into consideration the issues that the group is working for. In effect, congress members have to take notice and more people are knowledgeable and concerned about how their actions affect the environment and its preservation.

Some hindrances are that some coalitions are ad-hoc versus structured and the lack of structure makes it time consuming with no real leadership role. The back and forth about how to strategically approach a common goal can be frustrating because you all want the same thing you just disagree about the proper means of getting it.

The particular person I talked to was more in the lobbyist side of coalitions but the coalitions do carry over into amicus briefs, they just have another person in charge of that. It is just that amicus briefs do not come up that often but policy issues are a daily issue. This group also does not have any lawyers on hand but they are always willing to take a position when asked.

5.11 How groups were chosen

Based off the data collected in the Spaeth document, two lists were compiled. The first had the most connected interest groups based off both their frequency of signing and doing so as part of a coalition. The second list was seemingly unconnected groups that also had a high frequency of amicus signings but outside of a coalition. Given that it was unlikely to receive a high response rate, 30 letters were sent to the groups asking them to partake in the project. Groups were picked randomly between the two lists, with an equal number picked from both. However, given the importance of NWF, AARP and NACDL in our quantitative research, all of those groups were picked as well. It was also important to filter the choices to ensure a variety of different types of interest groups were included, i.e., environmental, civil rights, manufacturing, etc. After receiving no response, email was deemed a better alternative. The same letter was sent to all chosen groups. Ten responded to set up interviews and take part in the research.

5.12 Network Measures and Metrics

We compare network characteristics for interest group networks by looking at density, centralization, connectedness, efficiency, and the number of components. We follow (Eveland & Kleinman 2010) who chooses many of these characteristics based on theory about network impact on influence, social capital, and diffusion (see also (Burt 2005, Jackson 2008, Monge & Contractor 2003)). These comparisons allow us to consider questions about whether we would expect environmental, health, labor, or business groups to be more dense. Or whether these interest group characteristics reveal which groups are more efficient.

5.12.1 Density

Density of a network is the fraction of edges that exist versus the maximum number that is possible. The measure is bounded by zero and one and is subsequently referred to as sparse or dense. Density measures of how connected the network is and thus how easily information is or can be shared. In other words, how quickly diffusion of information is distributed.

More generalized coalitions seem to have greater density. These groups concern civil rights, women's rights and environmental groups which may take interest in myriad issues and sign on a number of briefs. For example, the American Jewish Committee focuses on women's rights, religious freedom, civil rights, etc. and thus has first-hand contact with many different groups within the coalition, gathering insight and expertise from respective groups. (It also seems to be the case that broad interests are correlated with membership-based groups but this is hard to ascertain. It follows logically as a way to draw in multiple members and receive funding may require a diffusion of interests based on ideology). Narrower interests within coalitions seem to form a leadership-based group like the NACDL where periphery groups lack multiple connections and focus the transfer of information between the leader, themselves and perhaps a small number of other groups. narrow interests reduce the number of possible contacts that share common traits, thus there is little reason to interact. Teammates, on the other hand, are highly dense in nature.

Agriculture and Mining have the highest density for the SIC general categories. Religious and Political groups have the highest density for the Membership Groups.

5.12.2 Centralization

Centrality is a measure for nodes in the network. It shows which nodes have more connections, which is interpreted as more influence, access or prestige. The PageRank measure without a constant term is recommended for undirected networks (Newman 2010) and an overall centralization measure for the entire subnetwork by issue group. Eveland & Kleinman (2010) points out that "a network with a high degree of centralization indicated a large variation in centrality scores across individuals in the network, with a small number of individual having considerably higher centrality than the norm." So a centralized network has a few nodes with many links, while a decentralized network has nodes with little variation in the number of links among nodes. Highly centralized networks have been characterized as hierarchical (Sandström & Carlsson 2008).

Coalitions with members that are highly centralized seem to be less dense and result in the flow of information to and from the centralized players in the leadership role more so than one another. Coalitions that have teammates of equal stature, size, etc. have a lower level of centralization and higher density. Hierarchy and leadership roles exist when a central player connects seemingly unconnected groups on a common issue such as the NACDL does on broad-based left wing issues. Centralized groups are more efficient in the dissemination of information because it flows between fewer actors. The leader of the group has more power and centrality, meaning they are able to influence information flow between actors. They exert influence over the others. When a group is highly heterogeneous in their level of centrality we see a hierarchical relationship. In general, coalitions with a broad range of interests are less likely to be highly centralized where the expertise may vary from group to group and thus no group exerts much more influence than the others in the grand scheme of things. Groups with fewer interests are likely to see higher centralization based on reputation, access to information and funds and previous success in lobbying or before the courts.

The centralization measure is 0.040 for the full network, followed by 0.354 for Religious and 0.227 for Labor Union groups.

5.12.3 Connectedness

The connectedness measure is highest for the full network at 0.504, followed by Service and Manufacturing for the SIC general categories, and then Religion and Labor for Membership Groups.

5.12.4 Efficiency

The efficiency measure is 0.989 for the full network. It is 0.985 for Services, 0.938 for Professional, and 0.836 for Religious. The low scores here correlate with the Lone Wolves characterization of networks.

5.12.5 Components

(Newman 2010) defines a component in an undirected network like ours as ". . . a maximal subset of vertices such that each is reachable by some path from the others (page 196)." Component measures get at

the idea of groups within networks.

Broader groups are likely to be in contact, either directly or indirectly, to more member of the network and thus there are fewer components. These groups can easily be connected with all others within the network. This makes the diffusion of information less efficient. There are likely to be more components in smaller issue areas, following on the premise that these groups are less dense. Information is likely to be shared with only a few other members so a connection, direct or indirect, doesn't occur as frequently.

The components measure is 607 for the full network, 129 for Professional groups, which contrasts with 23 for Labor. Low scores here again correlate with the Lone Wolves characterization of networks.

Table 3 lists the industry subnetworks that we compared across typical network properties. The networks range in size from the full network of 4,111 organizations to the largest SIC-based subnetwork, Services, with 2,015 organizations to the smallest subnetwork, Construction, with a mere 3 organizations.

5.13 Are the Networks Similarly Structured?

We follow (Faust & Skvoretz 2002) to determine if interest group subnetworks are similarly structured in spite of surface differences. Their method allows comparisons of the overall patterning of similarities among a large collection of interest groups. Identifying which interest group subnetworks are similarly structured is the first step in asking *why* some are similar and others are different. Subsequently, one asks what the implications of alternative structures are for the functioning and effectiveness of the subnetworks. For example, what are the implications of different structures for environmental, health, labor or business groups?

One of the most notable feature of Figure 8 and Figures 9 is the diversity of networks for interest groups. Figure 8 presents networks that have signed amici briefs classified by a general 2-level Standard Industrial Code (SIC). There are many lone wolves for agriculture, mining, construction, transportation, wholesale trade, retail, finance, and public administration. Lone wolves do not collaborate with other groups. However, almost all of these networks (notable exceptions include construction and public administration, do have some cluster where nodes interact with not one, but a series of nodes in the network. Star shapes indicate that the diffusion of information between these nodes comes from all directions, each group playing an important role with no leader (see for example the star within agriculture and stars and triangles in transportation and finance); they are teammates with connections to each member within the network. This implies though that they will be less efficient. Manufacturing shows more of a leadership structure with many other groups connected via a center hub of information. Thus, these manufacturing coalitions are likely to show more efficiency, less density, and a larger number of components. Public service and unknowns are likely to be more of a teammate structure. Figure 9 presents the subnetworks of interest groups classified as membership organizations by the SIC.

6 Discussion

The project aims to make both theoretical and empirical contributions to the study of political behavior and network analysis.⁶ The illuminated structures lend some insight into the central players and overall formation of the network from 2000 – 2007. Factions of interest groups are tied together by central players, who act as hubs, leaving a disparate collection of organizations that work alone. A mixed strategy between acting as an efficient leader or a team player is pursued by many of the groups.

This model moves us toward a more focused examination of the multitude of factors that have created the current network of interest groups. The overall network is better characterized as segmented than centralized. The interest group covariates shows that policy interest, organizational structure of the groups,

⁶Additional work in the project examines the impact of interest group networks, including an analysis of how interest group network measures affect Supreme Court decision making. That is, there is an extensive literature on explaining the ideological direction of individual justices' votes and the decision to author an opinion (e.g., Rohde & Spaeth 1976, Segal & Spaeth 1993, Segal & Spaeth 2002, Sunstein et al. 2006). Interest groups are posited to have a major role. Our interest group network measures offer an improvement on the operationalization of the posited influence.

Table 3: Comparison of Network Properties by Industry

	Density	Centralization	Connectedness	Efficiency	Components	Vertices	Edges
Full Network	0.006	0.040	0.504	0.989	607	4111	48573
SIC Categories							
Agriculture	0.152	0.154	0.152	0.000	8	15	16
Mining	0.083	0.214	0.083	0.000	7	9	3
Construction	0.000	0.000	0.000	-	3	3	0
Manufacturing	0.067	0.209	0.235	0.735	37	115	438
Transportation	0.015	0.039	0.016	0.116	52	77	43
Wholesale	0.037	0.135	0.037	0.000	16	20	7
Retail	0.017	0.163	0.033	0.625	21	25	5
Finance	0.021	0.060	0.024	0.144	49	76	61
Services	0.007	0.050	0.452	0.985	343	2015	14463
Administration	0.018	0.100	0.018	0.000	10	11	1
Unknown	0.006	0.045	0.093	0.936	487	1745	9690
Membership Groups							
Business	0.026	0.116	0.102	0.769	89	236	708
Professional	0.012	0.095	0.168	0.938	129	340	703
Labor Union	0.054	0.227	0.271	0.834	23	56	83
Social & Civic	0.014	0.076	0.061	0.802	88	169	204
Political	0.069	0.194	0.069	0.000	39	52	91
Religious	0.072	0.354	0.401	0.836	30	106	398
Non-Classifiable	0.017	0.086	0.061	0.736	165	578	2830

Graph structural properties calculated for the full network, and SIC based subnetworks.

Figure 8: Interest Group Networks by General SIC Classification

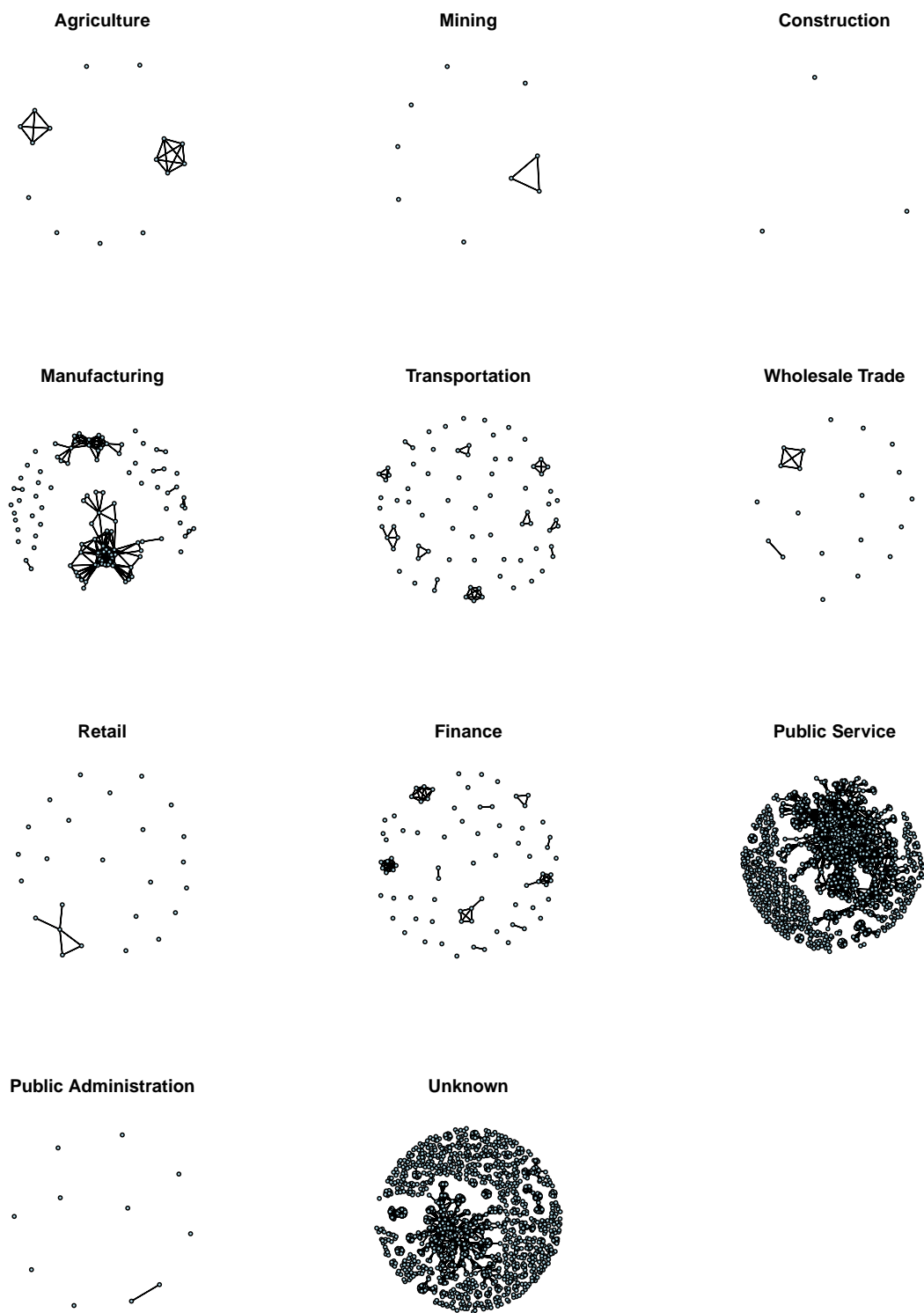
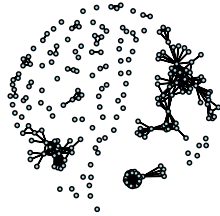
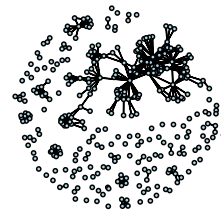


Figure 9: SIC Membership Organization Networks

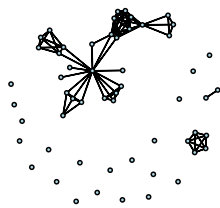
Business Associations



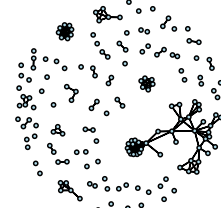
Professional Membership Organizations



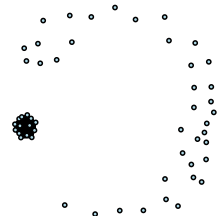
Labor Unions



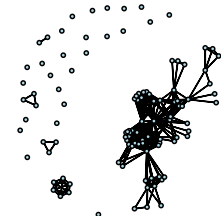
Civic, Social & Fraternal Organizations



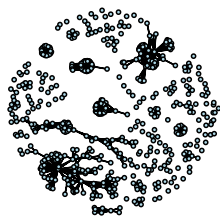
Political Organizations



Religious Organizations



Membership Organizations Unclassified Elsewhere



and resources all matter in choosing partners. Graph-theoretic and shared interest group attributes both help to recreate and characterize this large, complex interest group network.

The state of our democracy depends on the ability of individuals and organizations to find representation for their respective values in the bodies of government. Organizations, however, do not simply attempt to influence government alone. Instead, as network and interest group theories suggest, organizations typically collaborate. Combining forces is a time-honored tradition in the pursuit of political ends, and yet there is much to still learn about the gamut of networks in our political system and how they operate.

Our work helps provide additional information about interest group networks, which contributes to a fuller understanding of key political players and the behavior of those players, while also addressing the alternative theoretical perspectives on interest group coalition ideal types. While informative work has focused on understanding the network of interest groups across issue areas, we still have much to learn about purposive network formation.

References

- Ahuja, Gautam. 2000a. "Collaboration Networks, Structural Holes, and Innovation: A Longitudinal Study." *Administrative Science Quarterly* 45(3):425–455.
- Ahuja, Gautam. 2000b. "The Duality of Collaboration: Inducements and Opportunities in the Formation of Interfirm Linkages." *Strategic Management Journal* 21(3):317–343.
- Bacheller, John. 1977. "Lobbyists and the Legislative Process: The Impact of Environmental Constraints." *American Political Science Review* 71(1):242–263.
- Barabási, Albert-László. 2002. *Linked: The New Science of Networks*. New York: Perseus.
- Baum, Joel A. C., Tony Calabrese & Brian S. Silverman. 2000. "Don't Go It Alone: Alliance Network Composition and Startups' Performance in Canadian Biotechnology." *Strategic Management Journal* 21(3):267–294.
- Berry, Jeffrey M. 1977. *Lobbying for the People: The Political Behavior of Public Interest Groups*. Princeton University Press.
- Berry, Jeffrey M. & Clyde Wilcox. 1989. *The Interest Group Society*. Longman.
- Borgatti, S.P., A. Mehra, D.J. Brass & G. Labianca. 2009. "Network analysis in the social sciences." *Science* 323(5916):892.
- Box-Steffensmeier, Janet M. & Dino P. Christenson. 2009a. "Amicus Curiae Networks: Lobbying the Supreme Court." Paper prepared for presentation at the Annual Meeting of the Southern Political Science Association: Atlanta, GA.
- Box-Steffensmeier, Janet M. & Dino P. Christenson. 2009b. "Invaluable Involvement: Purposive Interest Group Networks in the 21st Century." *Paper Presented at the Annual Conferences of the Midwest Political Science Association and Southern Political Science Association*.
- Box-Steffensmeier, Janet M. & Dino P. Christenson. 2010. "The Factors of Interest Group Networks and Success: Organization, Issues and Resources." *Paper Presented at the Annual Conference on Political Networks at Duke University*.
- Burt, Ronald S. 2001. Structural Holes versus Network Closure as Social Capital. In *Social Capital: Theory and Research*, ed. Nan Lin, Karen Cook & Ronald S. Burt. Aldine Transaction chapter 2.
- Burt, R.S. 2005. *Brokerage and Closure: An Introduction to Social Capital*. Oxford University Press, USA.
- Caldeira, Gregory A. & John R. Wright. 1990. "Amici Curiae before the Supreme Court: Who Participates, When, and How Much?" *The Journal of Politics* 52(3):782–806.
- Carpenter, Daniel, Kevin M. Esterling & David M. J. Lazer. 1998a. "The Strength of Strong Ties: A Model of Contact-Making in Policy Networks with Evidence from U.S. Health Politics." *The Journal of Politics* 10(4):417–444.

- Carpenter, Daniel, Kevin M. Esterling & David M. J. Lazer. 1998*b*. "The Strength of Weak Ties in Lobbying Networks." *Journal of Theoretical Politics* 10(4):417–444.
- Carpenter, Daniel P., Kevin M. Esterling & David M. J. Lazer. 1998*c*. "The Strength of Weak Ties in Lobbying Networks: Evidence from Health Care Politics." *Journal of Theoretical Politics* 10:417–444.
- Clark, Peter B. & James Q. Wilson. 1961. "Incentive Systems: A Theory of Organizations." *Administrative Science Quarterly* 6(2):129–166.
- Coleman, James S. 1988. "Social Capital in the Creation of Human Capital." *American Journal of Sociology* 94(s1):95–120.
- Esterling, Kevin M. 2004. *The Political Economy of Expertise: Information and Efficiency in American National Politics*. Ann Arbor: University of Michigan Press.
- Eveland, WP & S. Kleinman. 2010. "Differentiating the general and political discussion networks of bounded groups using social network analysis." *Paper presented at the Midwest Association for Public Opinion Research*.
- Faust, K. & J. Skvoretz. 2002. "Comparing Networks Across Space and Time, Size and Species." *Sociological Methodology* 32(1):267–299.
- Freeman, Linton C. 1979. "Centrality in Social Networks, Conceptual Clarification." *Social Networks* 1(3):215–239.
- Gibson, James L. 1997. *United States Supreme Court Judicial Data Base, Phase II: User's Guide*.
- Gilsing, Victor A. 2005. *The Dynamics of Innovation and Interfirm Networks: Exploration, Exploitation and Co-evolution*. Edward Elgar.
- Gilsing, Victor, Bart Nooteboom, Wim Vanhaverbeke, Geert Duysters & Ad van den Oord. 2008. "Network embeddedness and the exploration of novel technologies: Technological distance, betweenness centrality and density." *Research Policy* 37(10):1717–1731.
- Granovetter, Mark S. 1973. "The Strength of Weak Ties." *The American Journal of Sociology* 78(6):1360–1380.
- Hagedoorn, John. 1993. "Understanding the Rationale of Strategic Technology Partnering: Interorganization Modes of Cooperation and Sectoral Differences." *Strategic Management Journal* 14(5):371–385.
- Hamel, Gary. 1991. "Competition for Competence and Inter-Partner Learning Within International Strategic Alliances." *Strategic Management Journal* 12:83–103. Special Issue: Global Strategy.
- Heaney, M.T. 2004. "Issue networks, information, and interest group alliances: The case of Wisconsin welfare politics, 1993–99." *State Politics & Policy Quarterly* pp. 237–270.
- Heinz, John P., Edward O. Laumann, Robert L. Nelson & Robert H. Salisbury. 1993. *The Hollow Core. Private Interests in National Policy Making*. Harvard University Press.
- Hojnacki, Marie. 1998. "Organized Interests' Advocacy Behavior in Alliances." *Political Research Quarterly* 51(2):473–459.
- Hula, Kevin. 1995. Rounding Up the Usual Suspects: Forging Interest Group Coalitions. In *Interest Group Politics*, ed. Allan J. Cigler & Burdett A. Loomis. 4 ed. CQ Press.
- Hula, Kevin W. 1999. *Lobbying Together: Interest Group Coalitions in Legislative Politics*. Georgetown University Press.
- Jackson, M.O. 2008. *Social and Economic Networks*. Princeton University Press.
- Kingdon, John W. 1981. *Congressmen's Voting Decisions*. 2 ed. New York: Harper & Row.
- Mahoney, Christine. 2004. "The Power of Institutions: State and Interest-Group Activity in the European Union Politics." *European Union Politics* 5(4):441–466.

- Mayhew, David R. 1974. *Congress: The Electoral Connection*. New Haven: Yale University Press.
- McEvily, Bill & Akbar Zaheer. 1999. "Bridging Ties: A Source of Firm Heterogeneity in Competitive Capabilities." *Strategic Management Journal* 20(12):1133–1156.
- Monge, P.R. & N.S. Contractor. 2003. *Theories of communication networks*. Oxford University Press, USA.
- Newman, M. 2010. *Networks: An Introduction*. Oxford Univ Pr.
- Nooteboom, Bart. 1992. "Towards a Dynamic Theory of Transactions." *Journal of Evolutionary Economics* 2(4):281–299.
- Owen-Smith, Jason & Walter M. Powell. 2004. "Knowledge Networks as Channels and Conduits: The Effects of Spillovers in the Boston Biotechnology Community." *Organization Science* 15(1):5–21.
- Powell, Walter W., Kenneth W. Koput & Laurel Smith-Doerr. 1996. "Interorganizational Collaboration and the Locus of Innovation: Networks of Learning in Biotechnology." *Administrative Science Quarterly* 41(1):116–145.
- Rohde, David W. & Harold J. Spaeth. 1976. *Supreme Court Decision Making*. W.H.Freeman & Co Ltd.
- Rowley, Tim, Dean Behrens & David Krackhardt. 2000. "Redundant Governance Structures: An Analysis of Structural and Relational Embeddedness in the Steel and Semiconductor Industries." *Strategic Management Journal* 21(3):369–386.
- Sandstrom, A. & L. Carlsson. 2008. "The Performance of Policy Networks: The Relation between Network Structure and Network Performance." *Policy Studies Journal* 36(4):497–524.
- Schulz, Kay L. & John T. Tierney. 1986. *Organized Interests and American Democracy*. Harper and Row.
- Segal, Jeffrey A. & Harold J. Spaeth. 1993. *The Supreme Court and the Attitudinal Model*. New York: Cambridge University Press.
- Segal, Jeffrey A. & Harold J. Spaeth. 2002. *The Supreme Court and the Attitudinal Model Revisited*. New York: Cambridge University Press.
- Shan, Weijian, Gordon Walker & Bruce Kogut. 1994. "Interfirm Cooperation and Startup Innovation in the Biotechnology Industry." *Strategic Management Journal* 15(5):387–394.
- Spaeth, Harold J. 1953. *United States Supreme Court Judicial Database*. 1953–2007 ed. ICPSR.
- Stuart, Toby E. 1998. "Network Positions and Propensities to Collaborate: An Investigation of Strategic Alliance Formation in a High-Technology Industry." *Administrative Science Quarterly* 43(3):668–698.
- Sunstein, C.R., D. Schkade, L.M. Ellman & A. Sawicki. 2006. *Are Judges Political?: An Empirical Analysis of the Federal Judiciary*. Brookings Institution Press.
- Teece, D. J. 1986. "Profiting from Technological Innovation: Implications for Integration, Collaboration, Licensing and Public Policy." *Research Policy* 15(6):286–305.
- Whitford, Andrew B. 2003. "The Structures of Interest Coalitions: Evidence from Environmental Litigation." *Business and Politics* 5(1):45–64.
- Xu, A. & X. Zheng. 2009. "Dynamic Social Network Analysis Using Latent Space Model and an Integrated Clustering Algorithm." *Dependable, Autonomic and Secure Computing, 2009. DASC'09. Eighth IEEE International Conference on* pp. 620–625.